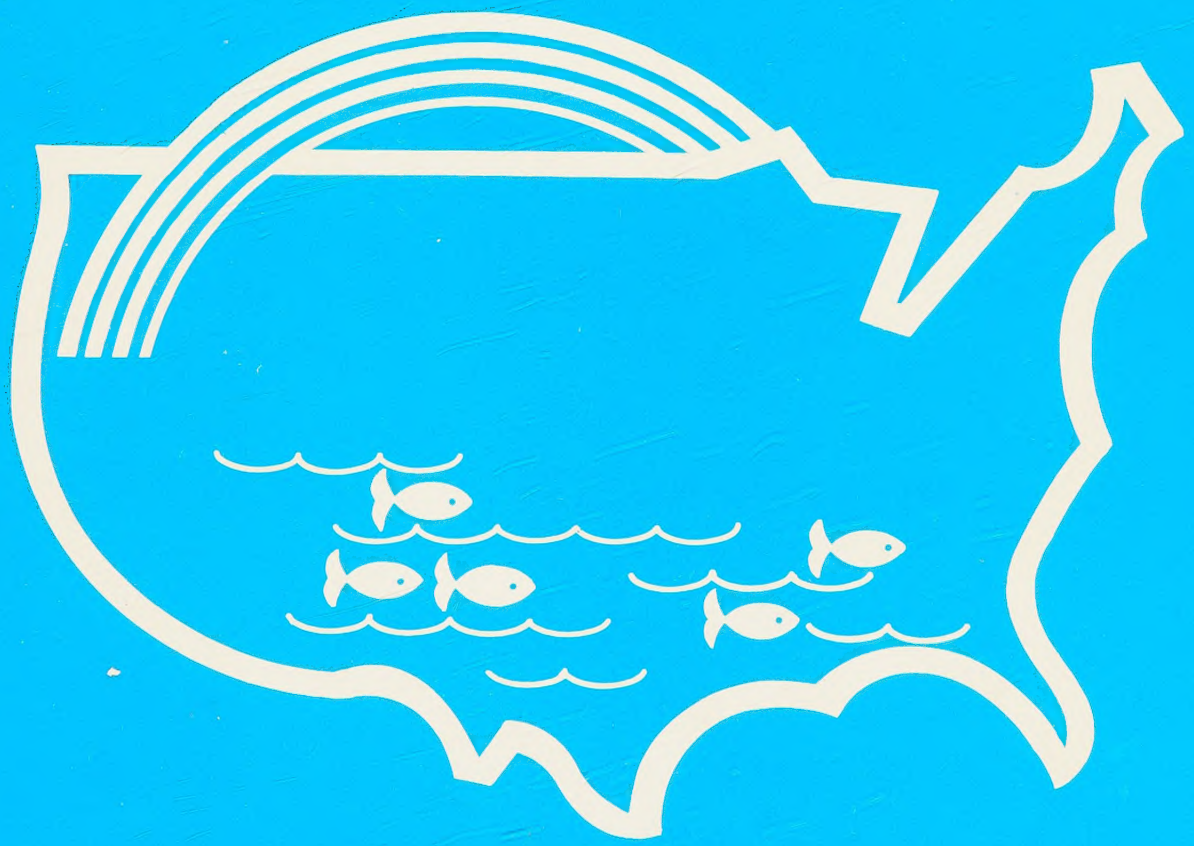
Current Fishery Statistics No. 8385

Fisheries of the United States, 1986

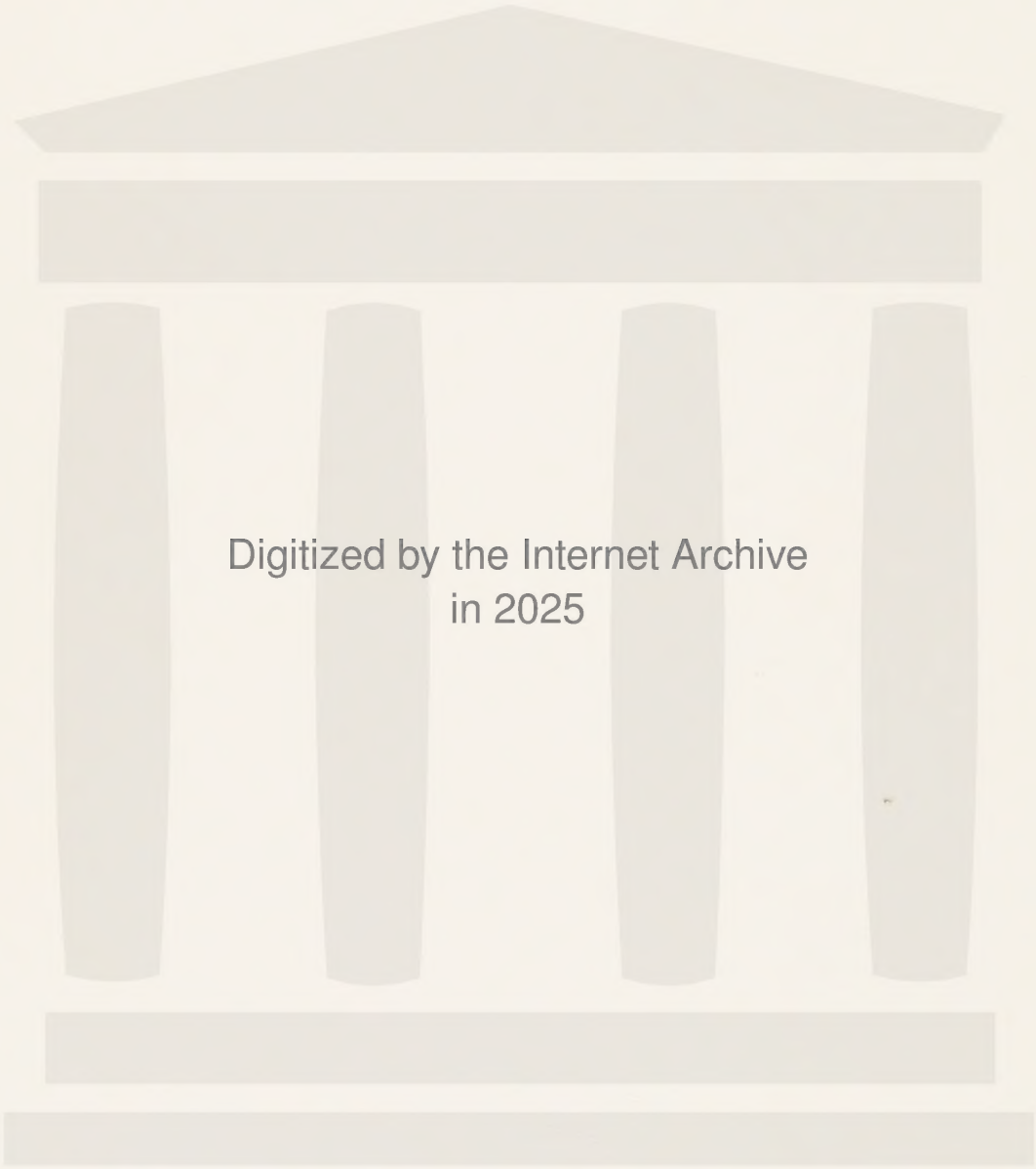
April 1987



U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

National Marine Fisheries Service


Digitized by the Internet Archive
in 2025

https://archive.org/details/fisheries-of-the-united-states_1986

Current Fishery Statistics No. 8385

Fisheries of the United States, 1986

Prepared by
National Fishery Statistics Program
B. G. Thompson, Chief

Washington, D.C.
April 1987

U.S. DEPARTMENT OF COMMERCE
Malcolm Baldrige, Secretary
National Oceanic and Atmospheric Administration
Anthony J. Calio, Under Secretary
National Marine Fisheries Service
William E. Evans, Assistant Administrator for Fisheries

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

PREFACE

FISHERIES OF THE UNITED STATES, 1986

This publication is a preliminary report for 1986 on commercial and recreational fisheries of the United States and foreign catches in the U.S. Exclusive Economic Zone (EEZ). This annual report provides timely answers to frequently asked questions for the previous year.

SOURCES OF DATA

Information in this report came from many sources. Field offices of the National Marine Fisheries Service (NMFS), in cooperation with various States, collected and compiled data on U.S. commercial landings and processed fishery products. The NMFS field offices also compiled data on the foreign catch from reports submitted by designated foreign officials. The NMFS National Fishery Statistics Program in Washington, D.C., managed the collection and compilation of recreational statistics, and tabulated and prepared the data for publication. Sources of other data appearing in this publication are: U.S. Bureau of the Census, U.S. Bureau of Labor Statistics, U.S. Coast Guard, U.S. Customs Service, U.S. Department of the Interior, U.S. Department of Agriculture, Food and Agriculture Organization (FAO) of the United Nations (Rome), and the countries fishing in the U.S. EEZ.

PRELIMINARY AND FINAL DATA

Data on U.S. commercial and recreational landings, foreign catches, employment, prices, and production of processed products are preliminary for 1986. Final data will be published in Fishery Statistics of the United States and other NMFS Current Fishery Statistics publications.

DEFINITIONS - (See Glossary)

As in past issues of this publication, the units of quantity and value are defined as follows: U.S. landings and foreign catch are shown in round weight (mollusk shells excluded), unless otherwise noted; quantities shown for U.S. imports and exports are in product weight, as reported by the U.S. Bureau of the Census, unless otherwise noted; the value of the U.S. domestic commercial catch is exvessel the value for U.S. imports is generally the market value in the foreign (exporting) country and, therefore, excludes U.S. import duties, freight charges from the foreign country to the United States, and insurance; the value for exports is generally the value at the U.S. port of export, based on the selling price, including inland freight, insurance, and other charges. Countries and territories shown in the U.S. foreign trade section are established for statistical purposes in the Tariff Schedules of the United States Annotated (Tariff Commission) and reported by the U.S. Bureau of the Census.

SUGGESTIONS

The National Fishery Statistics Program wishes to provide the kinds of data sought by users of fishery statistics, and welcomes any comments or suggestions that will improve this publication.

Address all comments or questions to:

Chief, National Fishery Statistics Program (F/S21)
National Marine Fisheries Service, NOAA
Washington, DC 20235
202-673-5335

ACKNOWLEDGEMENT

The National Fishery Statistics Program of NMFS takes this opportunity to thank members of States, industry, and foreign nations who provided the data that made this publication possible.

Program leaders of the field offices were: Ronnee Schultz and Robert A. Hall, New England, Middle Atlantic, Chesapeake, Great Lakes, and northern Mississippi River States; Richard Raulerson and Ernest Snell, South Atlantic, Gulf, and southern Mississippi River States; Patricia J. Donley, California; John K. Bishop, Oregon and Washington; Doyle E. Gates, Hawaii; and Janet Smoker, Alaska.

Members of the Washington, D.C., National Fishery Statistics Program who helped with this publication were: Mary Cotton, Margret Dancy, Ronald Essig, Donald FitzGibbon, Mark Holliday, Willie Mae Holloway, Steve Koplin, Robert Massey, Gary McBride, Barbara O'Bannon, James Price, Robert Rosette, Richard Schween, B. G. Thompson, William Uttley, Michael Williams, Leila Wise, and John Witzig.

CONTENTS

	Page
PREFACE AND ACKNOWLEDGEMENTS	ii
REVIEW	iv
U.S. COMMERCIAL FISHERY LANDINGS:	
Species	1
Regions	3
States	4
Ports	5
Disposition	6
Catch by species and distance from shore (thousand pounds)	8
Catch by species and distance from shore (metric tons)	12
Historical landings by regions, 1920-86	16
U.S. JOINT VENTURE CATCHES	19
U.S. MARINE RECREATIONAL FISHERIES	20
U.S. EXCLUSIVE ECONOMIC ZONE:	
Foreign catch, by continent and country	29
Foreign catch, by species and area	31
Foreign catch, by country and species	33
WORLD FISHERIES:	
U.S. and world	39
Countries	40
Continents	41
Fishing areas	41
Species groups	42
Disposition	42
Imports and exports, by leading countries	43
U.S. PRODUCTION OF PROCESSED FISHERY PRODUCTS:	
Value	45
Fish sticks, portions, and breaded shrimp	45
Fillets and steaks	46
Canned	47
Industrial	50
U.S. COLD STORAGE HOLDINGS	51
U.S. IMPORTS:	
Edible and nonedible	53
Value and duties	53
Principal items	54
Continent and country	55
Blocks	56
Groundfish fillets and steaks, by species	56
Groundfish fillets and quota	57
Canned tuna and quota	57
Shrimp	58
Industrial	59
U.S. EXPORTS:	
Principal items	61
Continent and country	62
Edible and nonedible	64
Shrimp	65
Salmon	66

	Page
U.S. EXPORTS - Continued:	
King crab	67
Snow (tanner) crab	67
Herring	67
Industrial	68
U.S. SUPPLY:	
Edible and nonedible	70
Finfish and shellfish	71
Blocks	72
All fillets	72
Groundfish fillets	72
Tuna	73
Canned sardines	74
Canned salmon	74
Clam meats	74
King crab	75
Snow (tanner) crab	75
Canned crabmeat	75
Lobster, American	76
Lobster, spiny	76
Oysters	77
Scallop meats	77
Shrimp	78
Industrial	79
PER CAPITA:	
U.S. consumption	80
U.S. use	83
World consumption-by region and country	84
PRICE, INDEX OF EXVESSEL	86
EMPLOYMENT, CRAFT, AND PLANTS	89
FISHERY PRODUCTS INSPECTION	92
FISHERY COOPERATIVES	93
MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT OF 1976 (MFCMA):	
General	94
Optimum yield, U.S. capacity, reserve, and allocations	96
GENERAL ADMINISTRATIVE INFORMATION	101
PUBLICATIONS:	
National Marine Fisheries Service	108
Government Printing Office	109
National Technical Information Service	110
SERVICES:	
Sea Grant Marine Advisory	112
Fisheries Development	114
Inspection	Inside back cover
GLOSSARY	115
INDEX	118

REVIEW

IMPORTANT SPECIES

U.S. LANDINGS. Commercial landings (edible and industrial) by U.S. fishermen at ports in the 50 States were 6.0 billion pounds (2.7 million metric tons) valued at $2.8 billion in 1986--a decrease of 227.0 million pounds (103,000 metric tons) in quantity, but an increase of $437,000 in value compared with 1985. Increased landings of shellfish such as crabs, shrimp, and squid helped offset declines in major finfish species such as flounders, menhaden and salmon. Landings of sea herrings, Alaska pollock and tuna increased. The 1986 average exvessel price per pound paid to fishermen of 46 cents was 23 percent higher than the 37 cents they received in 1985. Finfish accounted for 81 percent of total landings but only 48 percent of the total value of finfish and shellfish.

Commercial landings by U.S. fishermen at ports outside the 50 States or transferred in the U.S. Exclusive Economic Zone (EEZ) onto foreign vessels (joint ventures) were an additional 3.4 billion pounds (1.5 million metric tons) valued at $327.1 million. This was a 37 percent or 914.5 million pound (415,000 metric tons) increase in quantity and a $50.5 million (18 percent) increase in value compared with 1985. Most of these landings consisted of tuna landed at canneries in Puerto Rico and joint venture catches of Alaska pollock.

Edible fish and shellfish landings in the 50 States were 3.4 billion pounds (1.5 million metric tons) in 1986--an increase of 99.0 million pounds (45,000 metric tons) compared with 1985. Landings of cods, flounders, and salmon decreased, but there were increases in Alaska pollock, tuna, and shrimp. In 1986, domestic production was 35 percent and imports 65 percent of the total U.S. edible supply.

Landings for reduction and other industrial purposes were 2.6 billion pounds (1.2 million metric tons) in 1986--a decrease of 11 percent compared with 1985.

JOINT VENTURE CATCH IN THE U.S. EEZ. Joint venture catches by U.S. fishermen unloaded onto foreign vessels were 2.9 billion pounds (1.3 million metric tons) valued at $154.9 million. This was a 44 percent increase over 1985, when 2.0 billion pounds (911,000 metric tons) were caught, valued at $104.3 million. The major species were flounders, Pacific hake, and Alaska pollock.

FOREIGN CATCH IN U.S. EEZ. The foreign catch of fish (excluding tunas) and shellfish in the U.S. EEZ was 588,000 metric tons (1.3 billion pounds) in 1986, a 49 percent decrease compared to 1985 and 53 percent below the average for the preceding 5 years. As in other years, the U.S. EEZ off Alaska supplied the largest share of the foreign catch (84 percent) followed by California, Oregon and Washington (12 percent), and the North Atlantic (4 percent).

Alaska pollock comprised 60 percent of the foreign catch; Pacific flounders, 13 percent; Pacific hake, 12 percent; Pacific cod, 9 percent; and other fish and shellfish the remainder.

Japan continued as the leading nation fishing in the U.S. EEZ with a catch of 385.7 thousand metric tons, 66 percent of the total foreign catch. Catches by vessels of the Republic of Korea, the second leading nation fishing in the U.S. EEZ, were 97.3 thousand metric tons representing 16 percent of the catch in 1986.

The foreign catch in the Pacific U.S. EEZ in 1986 was 563,000 metric tons, 562,000 metric tons less than 1985. Over 84 percent of this catch was made in the Eastern Bering Sea; 13 percent was taken off California, Oregon, and Washington, and 3 percent was taken off the Gulf of Alaska. Alaska pollock, 353,000 metric tons (63 percent of the total), was the leading species followed by Pacific flounders, 78,000 metric tons (14 percent); and Pacific cod, 55,000 metric tons (10 percent). Japan and the Republic of Korea were the major countries fishing this area in 1986 taking 86 percent of the total catch.

Since June, 1978 Canadian authorities have excluded almost all U.S. fishing vessels from Canadian waters, and United States authorities have excluded almost all Canadian fishing vessels from U.S. waters. However, in the Pacific, halibut fishing continued under the United States - Canada Halibut Convention. In the Atlantic, vessels of both nations fished in a boundary region until October, 1984 when the International Court of Justice resolved the long-standing boundary dispute by establishing a line which crosses Georges Bank essentially mid-way between the U.S./Canadian claims. The tables appearing on pages 29-38 have been adjusted to delete Canadian catch data, which were minimal.

Foreign catches in the North Atlantic U.S. EEZ in 1986 were 26,000 thousand metric tons, 11,000 thousand metric tons (31 percent) less than the 1985 catch when 37,000 metric tons were taken. The German Democratic Republic had the highest catch of 19,000 metric tons (74 percent) followed by Italy with 4,000 metric tons (16 percent). Atlantic mackerel catches amounted to 19,000 metric tons (74 percent). Other species of significance were squid, 5,000 metric tons (20 percent) and silver hake, 547 metric tons (2 percent).

U.S. VS. FOREIGN CATCH IN U.S. EEZ. The combined catch by U.S. and foreign vessels in the U.S. EEZ was 3.0 million metric tons in 1986 (up 6 percent) compared with 1985. However, the U.S. share was 80 percent of the total, up 21 percentage points from 1985.

WORLD LANDINGS. In 1985, the most recent year for which data are available, world commercial fishery landings were a record 84.9 million metric tons--an increase of 1.8 million metric tons (2 percent) compared with 1984. Japan continued to be the leading nation with 13 percent of the total catch; the USSR, second with 12 percent; China, third with 8 percent; followed by Chile and the United States, each with 6 percent.

PRICES. The procedure for calculating the Index of Exvessel Prices for all fish and shellfish has been reviewed and modified for inclusion in this year's publication. Major changes in the U.S. fishing industry had occurred since the index was originally designed. The result was that the "market basket" or group of species used to calculate the

IMPORTANT SPECIES

index was no longer representative of price trends for all fish and shellfish. The index has been recalculated with a new market basket and 1986 as the base year. The result is a recalculated annual index for 1981 - 1986. A monthly index of exvessel prices will be added to the 1987 publication. The annual index for edible fish and shellfish increased 12 percent. The annual index for industrial fish increased 6 percent.

PROCESSED PRODUCTS. The 1986 estimated value of the domestic production of edible and nonedible fishery products was $5.2 billion, $263.6 million more than the $4.9 billion in 1985. The value of edible products was $4.9 billion--an increase of $262.7 million (6 percent) compared with 1985. The value of industrial products was $276.0 million in 1986--an increase of $1.1 million (less than 1 percent) compared with 1985.

FOREIGN TRADE. The total import value of edible and nonedible fishery products was a record $7.6 billion in 1986--an increase of $947.7 million (14 percent) compared with 1985. Imports of edible fishery products (product weight) were a record 3.0 billion pounds (1.4 million metric tons) valued at a record $4.8 billion in 1986--an increase of 224.9 million pounds (8 percent) in quantity and $749.2 million (18 percent) in value compared with 1985. Imports of nonedible (industrial) products also set a value record in 1986, with products valued at $2.8 billion--an increase of $198.6 million compared with 1985.

Total export value of edible and nonedible fishery products of domestic origin was $1.4 billion in 1986--an increase of $272.0 million (25 percent) compared with 1985. United States firms exported 735.0 million pounds (333,000 metric tons) of edible products valued at $1.3 billion--an increase of 86.9 million pounds (39,000 metric tons) in quantity and $279.5 million in value compared with 1985. Exports of nonedible products were valued at $66.3 million, $7.6 million less than 1985 nonedible exports. The $154.9 million received for U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ in joint venture operations are not included in the export statistics.

SUPPLY. The U.S. supply of edible fishery products (domestic landings plus imports, round weight equivalent) was a record 9.6 billion pounds (4.4 million metric tons) in 1986--an increase of 283.0 million pounds (3 percent) compared with the previous record supply in 1985. The change reflects an increase of 3 percent in imports, and an increase of 3 percent in domestic commercial landings. The supply of industrial fishery products was 4.7 billion pounds (2.2 million metric tons) in 1986--a decrease of 1.1 billion pounds (18 percent) compared with 1985. Domestic commercial landings for industrial products of 2.6 billion pounds (1.2 million metric tons) was 563.0 million pounds less than the record of 3.2 billion pounds set in 1983.

PER CAPITA CONSUMPTION. U.S. consumption of fishery products was a record 14.7 pounds of edible meat per person in 1986, up 0.3 pound from 1985.

OTHER IMPORTANT SPECIES

Menhaden, with landings of 2.4 billion pounds (1.1 million metric tons), was the most important species in quantity in 1986, accounting for 40 percent of the commercial fishery landings in the United States. Menhaden was eighth in value.

Salmon was the second most important in quantity and value.

Crabs were the fourth most important in quantity and third in value.

Shrimp were third in quantity, but first in value.

Sea herring was the fifth most important in quantity, but low in value.

Pollock was the sixth most important in quantity, but low in value.

Lobster and clams were the fourth and fifth most important species in value, respectively.

Tuna landings by U.S.-flag vessels at ports outside the continental United States amounted to 467.2 million pounds. Other species landed at ports outside the United States were shrimp and swordfish, landed in Puerto Rico, Central, and South American ports, and Atlantic and Pacific groundfish, squid, etc., transferred onto foreign vessels in the U.S. EEZ.

Cameron, Louisiana, was the leading U.S. port in quantity of commercial fishery landings, followed by Pascagoula-Moss Point, Mississippi; Empire-Venice, Intercoastal City and Dulvac-Chauvin, Louisiana. Menhaden was the principal species landed at these ports.

New Bedford, Massachusetts, was the leading U.S. port in terms of value, followed by Dulac-Chauvin, Louisiana; Kodiak, Alaska, Brownsville-Port Isabel, Texas; and Aransas Pass-Rockport, Texas.

Louisiana led all States in volume with landings of 1.7 billion pounds, followed by Alaska, 1.2 billion; Virginia, 528.2 million; Mississippi, 418.4 million; and California, 386.7 million pounds.

Alaska led all States in value with $752.4 million, followed by Louisiana, $321.5 Texas, $246.1; Massachusetts, $243.5; and Florida, $154.5 million.

REVIEW

IMPORTANT SPECIES

ALASKA POLLOCK AND OTHER PACIFIC TRAWL FISH. U.S. landings of Pacific trawl fish (Pacific cod, flounders, hake (Pacific whiting), Pacific ocean perch, Alaska pollock, and rockfishes) were 431.8 million pounds valued at $70.1 million--an increase of 11 percent in quantity compared with 1985.

Landings of Alaska pollock increased 40 percent to 130.4 million pounds, significantly higher than the 5-year average. Landings of Pacific cod were 104.4 million pounds - a decrease of 13 percent from 120.3 million pounds in 1985. Pacific hake (whiting) landings were 25.6 million pounds valued at $1.2 million, an increase of 9.3 million pounds (57 percent) and $390,000 (49 percent) compared with 1985. The 1986 landings of Pacific hake were 70 percent higher than the 5-year average.

The fleet of catcher/processor trawlers increased to fifteen by the end of the 1986 Alaskan groundfish season. In addition, there were three "mothership" processor vessels where domestic trawlers transferred groundfish at sea for processing. Almost 70 percent of the Alaskan groundfish harvest was delivered to these floating processers rather than shore-side processing operations.

In the California-Oregon-Washington trawl fishery, landings of widow rockfish, the most important component of the rockfish group, were 20.8 million pounds (6 percent higher than 1985) valued at $5.7 million. Peak landings of 60.9 million pounds occurred in 1981 as the stock was being fished down from virgin levels. Since 1983, regulations by the Pacific Fishery Management Council aimed at maintaining the stock at Maximum Sustained Yield (MSY) level have kept landings below 23.0 million pounds. The 1986 stock assessement by the NMFS Southwest Fisheries Center indicates that the stock is above the MSY level because of strong recent year-classes, and the 1987 catch level was set at 27.5 million pounds.

ANCHOVIES. U.S. landings of anchovies were 13.4 million pounds--a decrease of 1.1 million pounds (8 percent) compared with 1985. Of this amount, 12.2 million pounds (91 percent) were used as bait. The remaining landings of 1.2 million pounds went into reduction plants for fish meal and oil. A factor contributing to the lower landings was the stiff competition from substitute products in the fish meal and oil market.

HALIBUT. U.S. landings of Atlantic and Pacific halibut were 77.7 million pounds (round weight) valued at $82.9 million--an increase of 16.7 million pounds (27 percent), and $44.5 million (116 percent) in value compared with 1985. The Pacific fishery accounted for all but 101,000 pounds of the 1986 total catch. The average exvessel price per pound in 1986 was $1.07 compared with 63 cents in 1985.

In spite of the increased catch from 1985, fishing seasons were shorter in 1986 in all areas. A much larger fishing fleet than in 1985 and generally good stock conditions in most areas were the primary reasons for the shorter seasons and good catch. The International Pacific Halibut Commission issued 5,166 licenses to vessels from the U.S. to fish commercially for halibut in 1986. This was a 23 percent increase over the number of permits issued the previous year.

HERRING, SEA. U.S. commercial landings of sea herring were 210.1 million pounds valued at $48.9 million--an increase of 10.9 million pounds (5 percent) in quantity, and a decline of $1.1 million (2 percent) in value compared with 1985. Landings of Atlantic sea herring increased to 79.4 million pounds valued at $4.3 million--an increase of 22.2 million pounds (39 percent) in quantity and $1.3 (45 percent) in value compared with 1985. Landings of Atlantic sea herring remain low relative to historical levels. Juvenile herring (ages 1-3) support the traditional canner fishery. Fixed gear fisheries--primarily stop seines and weirs--which typically account for a high proportion of the catch of juvenile herring, were responsible for just 10 percent of the coastal Maine herring landings in 1986. In contrast, purse seiners have assumed increasing importance in the harvest of juvenile herring in recent years. Reduced abundance and availability to the fixed gear fisheries has resulted in low catch levels during this decade. The fishery is highly dependent on recruitment; year class strength has been relatively poor throughout the 1980's. The outlook for the fishery is not encouraging without stock rebuilding.

Landings of Pacific sea herring were 130.8 million pounds valued at $44.6 million--a decrease of 11.3 million pounds (8 percent) in quantity, and $2.4 million (5 percent) in value compared with 1985. Although Alaskan landings of 112.5 million pounds decreased by 10.9 million pounds (9 percent) compared with 1985, the 1986 value was about $400,000 greater than 1985. Increased spawn-on-kelp harvest accounted for most of the increased value of the fishery, rather than an increase in price paid per ton of sac roe or food/bait herring. The average exvessel price per pound of Pacific sea herring was 34 cents in 1986 compared with 33 cents in 1985.

JACK MACKEREL. Landings of jack mackerel in 1986 were 23.7 million pounds valued at $1.8 million--an increase of 2.8 million pounds (14 percent) in quantity but only $5,000 in value compared with 1985. Landings continued to be well below the 5-year average. The 1986 average exvessel price per pound was 7 cents--1 cent less than 1985.

MACKEREL, ATLANTIC. U.S. landings of Atlantic mackerel were 9.4 million pounds valued at $1.2 million--an increase of 2.8 million pounds (43 percent) in quantity and $208,000 in value (21 percent) when compared with 1985. New Jersey was the leading State for the sixth consecutive year with 4.7 million pounds (51 percent of the total catch); followed by Massachusetts, 1.5 million pounds (16 percent) and Virginia, 1.1 million pounds (11 percent). The average exvessel price per pound in 1986 was 13 cents, down slightly from 1985.

Recent assessment information suggests that the Northwest Atlantic mackerel stock is continuing to expand due to the above average strength of recent year classes. The Atlantic mackerel stock shows major opportunities for the U.S. industry in the future.

MACKEREL, PACIFIC. Landings of Pacific mackerel, managed under a California State quota, were 85.4 million pounds valued at $6.4 million--an increase of 10.0 million pounds (13 percent) in quantity and $84,000 (1 percent) in value compared with 1985. The average exvessel price remained stable at about 8 cents per pound.

MENHADEN. The U.S. menhaden landings were 2.4 billion pounds valued at $93.8 million--a decrease of 348.0 million pounds (13 percent) in quantity and $6.9 million (7 percent) in value compared with 1985. Landings decreased by 226.8

million pounds (29 percent) in the Atlantic States and decreased by 121.3 million pounds (6 percent) in the Gulf States compared with 1985. Menhaden are used primarily for the production of meal, oil, and solubles. Small quantities are used for bait and canned pet food.

Landings along the Atlantic coast were 564.8 million pounds valued at $26.3 million. Although spawning stock sizes have improved somewhat since the population crashed in the early 1960's, the magnitude and distribution of current fishing effort will likely prevent short term landings from reaching much higher levels than at present according to NMFS scientists. Gulf region landings were 1.8 billion pounds valued at $67.5 million. This catch is slightly below that of the previous three record catches of 2.2 billion pounds in 1984, 2.0 billion pounds in 1983, and 1.9 billion pounds in 1985. NMFS Southeast Fisheries Center scientists had predicted that the fishery could not sustain the record levels of harvest of 1983 and 1984, and that landings would eventually decline.

NORTH ATLANTIC TRAWL FISH. North Atlantic landings of butterfish, Atlantic cod, cusk, flounders (blackback, fluke, yellowtail and other), haddock, red and white hake, ocean perch, pollock, and whiting (silver hake) were 309.4 million pounds valued at $190.5 million--a decrease of 48.2 million pounds (13 percent) in quantity, but an increase of $7.9 million (4 percent) in value compared with 1985. Of these species, flounders led in value, accounting for 55 percent of the total; followed by Atlantic cod, 19 percent; and pollock, 7 percent.

Landings of Atlantic cod declined for the third consecutive year to 61.1 million pounds in 1986, 38 percent below the 5-year average. The 1986 catch was the lowest since 1976. The exvessel price per pound was 59 cents per pound in 1986 compared with 42 cents per pound in 1985. Abundance of both the Georges Bank and Gulf of Maine stocks is currently at or near record-low levels. Fishing mortality, which attained record-high levels in 1985, declined in 1986 but still remained above levels that would promote significant stock rebuilding. Recruitment of the strong 1985 year class during the 1987 fishing year should result in increased scrod cod landings. Since September 1986, the U.S. Atlantic cod fisheries have been managed under the Northeast Multispecies Fisheries Management Plan (FMP). The FMP implemented a minimum landings size for cod (17 inches), a minimum mesh size for otter trawls catching cod in the offshore areas (5 1/2"), and established small mesh/large mesh fishing areas and seasons for species taken in the U.S. North Atlantic trawl fishery.

The 1986 landings of yellowtail flounder were 22.9 million pounds, a decrease of 1.6 million pounds from 1985 and 48 percent below the 5-year average. This fishery remains heavily dependent upon incoming recruitment. Poor recruitment of year classes since 1981 has caused declining landings.

Haddock landings are near historic lows, declining in 1986 to 11.0 million pounds (down 24 percent from 1985). Value decreased to $10.9 million (down 19 percent from 1985). Future recruitment prospects are poor and the general outlook for haddock stocks remains poor for 1987.

The North Atlantic pollock landings were 54.5 million pounds in 1986, the highest level ever recorded by this fishery and exceeding the 5-year average by almost 50 percent. These landings were made despite the fact that the abundance of pollock has declined substantially in recent years from record high levels in the late 1970's and early 1980's. Consequently, current fishing effort and mortality rates are extremely high.

PACIFIC SALMON. U.S. commercial landings of salmon were 658.5 million pounds valued at $493.9 million--a decrease of 68.4 million pounds (9 percent) in quantity, but an increase of $54.1 million (12 percent) in value compared with 1985. Alaska accounted for 90 percent of the total landings; Washington, 7 percent; and Oregon and California the remaining 3 percent. Landings of 11,000 pounds of silver salmon were taken from the Great Lakes. Red salmon landings were 212.2 million pounds valued at $305.4 million, a decrease of 23.9 million pounds (10 percent) in quantity and an increase of $66.0 million (28 percent) in value compared with 1985. King salmon landings increased to 30.8 million pounds--up 3.7 million pounds (13 percent) from 1985. Pink salmon landings of 268.6 million pounds in 1986 decreased by 50.5 million pounds (16 percent); chum salmon, 86.5 million pounds, decreased 6.0 million pounds (7 percent); and silver salmon, 60.4 million pounds, increased 8.3 million pounds (16 percent) compared with 1985.

Alaska landings of 589.6 million pounds valued at $404.1 million were a decrease of 61.9 million pounds (10 percent) in quantity and an increase of $34.3 million (9 percent) in value compared with 1985. However, the 1986 landings were still the fourth largest in history. The distribution of Alaska salmon landings by species in 1986 was pink, 268.6 million pounds (46 percent); red or sockeye, 194.9 million pounds (33 percent); chum or keta, 73.7 million pounds (12 percent), silver or coho, 41.3 million pounds (7 percent), and chinook or king, 11.2 million pounds (2 percent). The pink salmon catch in Southeast Alaska (45.8 million pounds) and sockeye salmon in Bristol Bay (15.9 million pounds) were the largest contributors to the commercial fisheries. The exvessel price per pound for all species in Alaska was 69 cents in 1986, up 12 cents from 1985.

Washington salmon landings were 48.1 million pounds valued at $53.4 million--a decrease of 16.5 million pounds (26 percent) in quantity and an increase of $3.9 million (8 percent) in value compared with 1985. The biennial fishery for pink salmon went from 22.0 million pounds in 1985 to 4,000 pounds in 1986. Landings of silver salmon were 11.9 million pounds--up 2.2 million pounds (23 percent), followed by red salmon, 17.3 million (up 6 percent), chum, 12.8 million (up 13 percent), and chinook, 6.0 million pounds (up 14 percent) compared with 1985. The average exvessel price per pound for all species in Washington went from 77 cents in 1985 to $1.11 in 1986.

Oregon salmon landings were 13.4 million pounds valued at $15.3 million--an increase of 7.3 million pounds (119 percent) in quantity and $6.4 million (73 percent) in value compared with 1985. Red salmon was the only species to show a decrease, with 14,000 pounds landed in 1986 compared with 143,000 pounds in 1985. Landings of chinook salmon increased to 6.4 million pounds (up 68 percent); chum, 8,000 pounds (up 100 percent); and silver 6.9 million pounds (up 280 percent) compared with 1985. The average

exvessel price per pound for all species in Oregon decreased from $1.45 in 1985 to $1.14 in 1986.

California salmon landings were 7.4 million pounds valued at $21.2 million -- an increase of 2.8 million pounds (60 percent) in quantity and $9.5 million (81 percent) compared with 1985. Chinook salmon landings were 7.2 million pounds valued at $21.0 million -- an increase of 2.7 million pounds (60 percent) in quantity and $9.4 million (82 percent) in value compared with 1985. Landings of silver salmon increased to 195,000 pounds (up 141 percent) in quantity and $101,000 (up 79 percent) in value compared with 81,000 pounds and $128,000 in 1985. The average exvessel price per pound paid to fishermen for all species in 1986 was $2.86 compared with $2.52 in 1985.

SABLEFISH. U.S. commercial landings of sablefish were 84.9 million pounds valued at $45.9 million--an increase of 21.5 million pounds (34 percent) in quantity, and $17.2 million (60 percent) in value compared with 1985. The 1986 landings were 85 percent higher than the 5-year average of 45.8 million pounds. Landings increased 84 percent in Alaska to 58.3 million pounds. Landings showed a decrease in Washington with 6.0 million pounds (down 31 percent), Oregon with 10.3 million pounds (down 12 percent), and California with 10.3 million pounds (down 9 percent) compared with 1985. The average exvessel price per pound in 1986 was 54 cents compared with 45 cents in 1985.

TUNA. Landings of tuna by U.S. fishermen at ports in the 50 States, Puerto Rico, American Samoa, other U.S. territories, and foreign ports were 555.0 million pounds valued at $217.2 million--an increase of 38.9 million pounds (8 percent) in quantity and $5.5 million (3 percent) in value compared with 1985. The average exvessel price per pound of all species of tuna in 1986 was 39 cents compared with 41 cents in 1985.

Bigeye landings were 1.4 million pounds--an increase of 509,000 pounds (58 percent) compared with 1985. The average exvessel price per pound was $3.68 compared with $2.73 cents in 1985.

Skipjack landings were 237.5 million pounds--an increase of 26.5 million pounds (13 percent) compared with 1985. The average exvessel price per pound was 33 cents in 1986 compared with 32 cents in 1985.

Yellowfin landings were 292.8 million pounds--an increase of 17.2 million pounds (6 percent) compared with 1985. The average exvessel price per pound was 41 cents in 1986 compared with 43 cents in 1985.

Bluefin landings were 10.7 million pounds--an increase of 849,000 pounds (9 percent) compared with 1985. The average exvessel price per pound in 1986 was 64 cents compared with $1.26 in 1985. The average exvessel price of large east coast bluefin tuna was $3.33 per pound.

Sixteen percent of the tuna landings were at ports in the continental United States, principally California with 77 percent of the continental landings.

CLAMS. Landings of all species yielded 145.4 million pounds of meats valued at $134.9 million--a decrease of 5.2 million pounds (3 percent) in quantity, but an increase of $6.6 million (5 percent) in value compared with 1985. The average exvessel price per pound increased to 93 cents in 1986 from 85 cents in 1985.

Surf clams yielded 78.7 million pounds of meats valued at $42.6 million--an increase of 6.2 million pounds (9 percent) in quantity, and $3.7 million (10 percent) in value compared with 1985. New Jersey was the leading State with 36.5 million pounds (up 10 percent), followed by Virginia, 12.2 million (down 9 percent); New York, 11.9 million (up 61 percent); Maryland, 8.7 million (down 2 percent); and Massachusetts, 7.2 million pounds (down 9 percent). The average exvessel price per pound of meats was 54 cents, the same as 1985. Most of the surf clam landings continue to be produced from the heavily regulated EEZ fisheries off New Jersey and the Delmarva Peninsula, and some off New England. During 1986, 55.0 million pounds of surf clam meats (70 percent) were derived from EEZ waters. Inshore landings during 1986 were primarily from New Jersey and New York. The 1987 EEZ landings are predicted to be similar to 1986, while inshore New York landings should decline due to diminished resource abundance.

The ocean quahog fishery produced 45.4 million pounds of meats valued at $15.7 million--a decrease of 6.6 million pounds (13 percent) in quantity, and $158,000 (1 percent) in value compared with 1985. During 1986, 43.6 million pounds of ocean quahog meats (96 percent) were caught in the EEZ. New Jersey was the leading producer with 24.2 million pounds of meats accounting for 53 percent of the total ocean quahog landings. The value for New Jersey in 1986 was $7.3 million--a decrease of $1.4 million (16 percent) compared with 1985. Maryland landings were 12.0 million pounds valued at $3.6 million--a decrease of 1.2 million pounds (9 percent) in quantity and $469,000 (12 percent) in value compared with 1985. The average exvessel price per pound of meats was 35 cents in 1986, compared to 31 cents in 1985. The decline in ocean quahog landings in 1986 was due in primarily to a short term market glut in clam supplies, attributable in part to heavy landings from the Long Island Sound surf clam fishery. Abundance of ocean quahogs in the EEZ remains high and capable of supporting the 1987 EEZ quota of 60 million pounds for many years into the future.

The hard clam fishery produced 11.8 million pounds of meats valued at $46.8 million--a decrease of 4.9 million pounds (29 percent) in quantity, and $4.5 million (9 percent) in value compared with 1985. Landings in the New England region (mainly Rhode Island) were 5.7 million pounds of meats (down 9 percent); Middle Atlantic region, 1.3 million (up 19 percent); Chesapeake region, 886,000 pounds (up 56 percent); and the South Atlantic region, 2.9 million pounds (down 45 percent). The average exvessel price per pound of meats increased from $3.07 in 1985 to $3.97 in 1986.

Soft clams yielded 5.9 million pounds of meats valued at $18.4 million--a decrease of 2.0 million pounds (25 percent) in quantity, and $3.1 million (14 percent) in value compared with 1985. Maine was the leading State with 3.8 million pounds of meats (down 21 percent from 1985), followed by Massachusetts with 850,000 pounds (down 35 percent) and Maryland with 769,000 pounds (down 35 percent). The average exvessel price per pound of meats was $3.13 in 1986 compared with $2.73 in 1985.

CRABS. Landings of all species of crabs were 355.7 million pounds valued at $270.1 million--an increase of 18.0 million pounds (5 percent) in quantity and $67.1 million (33 percent)

in value compared with 1985. Landings of king and snow (tanner) crabs increased, while hard blue and king crab landings declined in 1986.

Hard blue crab landings were 184.5 million pounds valued at $58.0 million--a decrease of 6.0 million pounds (3 percent) in quantity, but an increase of $4.4 million (8 percent) in value compared with 1985. Hard blue crab landings in the Chesapeake region of 83.0 million pounds decreased 5.0 million pounds (6 percent), and the South Atlantic region landings of 40.1 million pounds decreased by 7.7 million pounds (16 percent). The Gulf region, with 55.5 million pounds, increased 6.1 million pounds (12 percent). The Middle Atlantic region landings of 6.0 million pounds valued at $2.4 million increased 566,000 pounds (10 percent) in quantity and $197,000 (9 percent) in value compared with 1985. The average exvessel price per pound of hard blue crabs was 31 cents in 1986 compared 28 cents in 1985.

Dungeness crab landings were 22.4 million pounds valued at $29.1 million--a decrease of 5.9 million pounds (21 percent) in quantity and $10.2 million (26 percent) in value compared with 1985. California led all States with landings of 6.8 million pounds (30 percent of the total landings)--an increase of 569,000 pounds (9 percent) compared with 1985. Washington increased in landings with 5.3 million pounds, up 7 percent compared with 1985. Oregon and Alaska decreased in landings with 4.6 million pounds (down 38 percent) and 5.7 million pounds (down 41 percent) respectively compared with 1985. The average exvessel price per pound was $1.30 in 1986 compared with $1.39 in 1985.

U.S. landings of king crab were 25.9 million pounds valued at $87.7 million--an increase of 10.5 million pounds (69 percent) compared with 1985. The average exvessel price per pound of $3.38 in 1986 was substantially higher than the $2.62 received in 1985. The fishery in the Bering Sea and Aleutian Islands produced landings of 24.9 million pounds valued at $84.6 million--an increase of 10.2 million pounds (70 percent) in quantity, and of $45.7 million (117 percent) in value compared with 1985. Landings from the Gulf of Alaska increased with landings of 995,000 pounds, (up 49 percent) with a value of $3.1 million (up 126 percent) in 1986.

Snow (tanner) crab landings were 110.0 million pounds valued at $83.4 million--a substantial increase of 24.3 million pounds (28 percent) in quantity and $31.9 million (62 percent) in value compared with 1985. Landings taken in the Bering Sea and Aleutian Islands of the smaller Chionoecetes opilio were 95.1 million pounds while C. bairdi landings were only 247,000 pounds. This was an increase of 31.6 million pounds (50 percent) for C. opilio and a decrease of 3.1 million pounds (93 percent) for C. bairdi compared with 1985. Landings of C. bairdi from the Gulf of Alaska were 14.6 million pounds--a decrease of 4.2 million pounds (22 percent) from 1985. The average exvessel price per pound was 76 cents in 1986, up from 60 cents in 1985.

LOBSTERS, AMERICAN. American lobster landings were 46.1 million pounds valued at $120.6 million--a decrease in quantity of only 99,000 pounds (less than 1 percent), but an increase in value of $5.7 million (5 percent) compared with 1985. Maine led in landings for the fifth consecutive year, with 19.7 million pounds valued at $46.2 million -- down 420,000 pounds (2 percent) from 1985. Massachusetts, the second leading producer, had landings of 15.0 million pounds valued at $41.2 million, a decrease of 553,000 pounds (4 percent) compared with 1985. These two States combined to produce 75 percent of the total national landings. The average exvessel price per pound was $2.62 in 1986 compared with $2.49 in 1986.

U.S. landings of American lobster have increased steadily during the last decade. This increase has largely been attributable to increases in the inshore trap fishery. The offshore fishery, which typically accounts for less than 20 percent of total landings, has remained relatively stable. A continual increase in fishing effort is responsible, in part, for higher landings in coastal waters. It is currently estimated that in excess of 3 million traps are set annually. Exploitation rates for lobsters in coastal waters are extremely high and there is concern for the long-term viability of the resource. Fishery-independent measures of abundance, however, indicate that lobster population levels are currently stable.

LOBSTERS, SPINY. U.S. landings of spiny lobster were 6.8 million pounds valued at $19.2 million--an increase of 1.5 million pounds (28 percent) in quantity and $4.9 million (35 percent) in value compared with 1985. Florida, with landings of 5.2 million pounds valued at $13.6 million, accounted for 77 percent of the total catch and 71 percent of the value. This was an increase of 1.5 million pounds (42 percent) in quantity and $4.7 million (53 percent) in value compared with 1985. Overall the average exvessel price per pound was $2.84 in 1986 compared with $2.69 in 1985.

OYSTERS. U.S. oyster landings yielded 40.5 million pounds of meats valued at $78.1 million--a decrease of 3.6 million pounds (8 percent) in quantity, but an increase of $8.0 million (11 percent) in value compared with 1985. The Gulf region (principally Louisiana with 58 percent of the region's total) led in production with 20.5 million pounds of meats, 50 percent of the national total; followed by the Chesapeake region with 11.4 million pounds (28 percent), and the Pacific coast region, with 5.5 million pounds (14 percent). The remainder was divided among the New England, Middle Atlantic, and South Atlantic regions. The average exvessel price per pound of meats was $1.93 in 1986 compared with $1.59 in 1985.

SHRIMP. U.S. landings of shrimp were 400.2 million pounds valued at $662.7 million--an increase of 66.5 million pounds (20 percent) in quantity, and $189.9 million (40 percent) in value compared with 1985. Shrimp landings increased in New England (up 12 percent), Gulf (up 16 percent), and Pacific coast (up 87 percent), but decreased in the South Atlantic (down 17 percent), when compared with 1985. The average exvessel price per pound of shrimp increased to $1.66 in 1986 compared with $1.42 in 1985. Gulf region landings were 304.1 million pounds compared with 262.9 million pounds in 1985. Louisiana led all Gulf States with 146.7 million pounds (up 28 percent), followed by Texas, 97.5 million pounds (up 16 percent); Florida (west coast), 24.3 million pounds (down 13 percent); Alabama, 22.7 million pounds (up 13 percent); and Mississippi, 12.9 million pounds (down 22 percent). Oregon was the third leading State with landings of 33.8 million pounds (up 128 percent), and Washington landings were 17.5 million pounds, up 90 percent when compared with 1985.

SCALLOPS. U.S. landings of all species of scallops were 22.3 million pounds of meats valued at $107.0 million--a

decrease of 7.3 million pounds (25 percent) in quantity, but an increase of $14.0 million (15 percent) in value compared with 1985. The average exvessel price per pound of meats increased from $3.13 in 1985 to $4.79 in 1986.

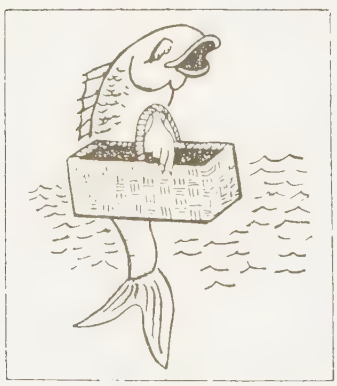
U.S. bay scallop landings were 735,000 pounds of meats valued at $6.5 million--a decrease of 596,000 pounds (45 percent) in quantity, but increased $589,000 (10 percent) in value compared with 1985. Massachusetts was the leading State with 400,000 pounds of meats, 54 percent of the national total. The average exvessel price per pound of meats was $8.88 in 1986 compared with $4.46 in 1985.

Sea scallop landings were 20.0 million pounds of meats valued at $97.4 million--an increase of 4.2 million pounds (26 percent) in quantity and $22.9 million (31 percent) in value compared with 1985. This was the highest annual catch since 1983. Massachusetts was the leading State in landings of sea scallops with 10.7 million pounds of meats, 54 percent of the national total. The average exvessel price per pound of meats in 1986 was $4.87 compared with $4.71 in 1985. The increase in the 1986 catch (the first increase since 1978) was due to the marked improvement in the abundance of harvestable-size scallops on Georges Bank and in the Middle Atlantic region from outstanding recruitment of the 1982 class. Abundance is expected to increase further in 1987 due to the additional strong recruitment from the 1983 year class. As a consequence, scallop landings in 1987 are expected to be higher than those of 1986. Since May 1982, the U.S. sea scallop fishery has been managed under the Atlantic Sea Scallop FMP. The FMP requires that the size of scallops landed average 30 meats to the pound.

Landings of calico scallops were 1.6 million pounds of meats valued at $3.1 million--a decrease of 10.9 million pounds (87 percent) in quantity and $9.4 million (75 percent) in value compared with 1985. Florida (east coast) had 100 percent of the total landings in 1986. The average exvessel price per pound of meats was $1.91 in 1986 compared with $1.00 in 1985.

SQUID. U.S. commercial landings of squid were 75.4 million pounds valued at $14.6 million--an increase of 26.5 million pounds (54 percent) and $3.3 million (30 percent) compared with 1985. California was the leading State with 42.2 million pounds, 56 percent of the national total. The overall Pacific coast squid production of 42.3 million pounds was 90 percent higher than the 1985 production of 22.3 million pounds. Squid landings on the Pacific Coast in 1986 continued the strong recovery being made from the climatic effects of El Nino (see glossary) which depressed past landings.

The New England region landings were 19.2 million pounds (up 28 percent from 1985). Landings in the Middle Atlantic region were 11.7 million pounds (up 46 percent), and the Chesapeake region, 1.4 million pounds (up 40 percent). The average exvessel price per pound for squid was 19 cents in 1986, compared with 23 cents in 1985.



REVIEW

PER CAPITA CONSUMPTION

PER CAPITA CONSUMPTION. U.S. per capita consumption of fish and shellfish was a record 14.7 pounds (edible meat) in 1986. This total was 0.3 pounds more than the 14.4 pounds consumed per capita in 1985. The change was due to increased imports, a reduction of stocks and increased consumption of all fishery products, expecially shellfish and canned tuna and shellfish.

Per capita consumption of fresh and frozen products registered a total of 9.0 pounds, identical to the 1985 total. Fresh and frozen finfish consumption, remained at 5.6 pounds per capita in 1986, while fresh and frozen shellfish registered 3.4 pounds per capita. Record shrimp consumption (2.2 pounds per capita) accounted for most of this increase. The fresh and frozen finfish consumption includes approximately 0.4 pounds per capita from domestic farm-raised catfish.

Consumption of canned fishery products was 5.4 pounds per capita in 1986, up 0.3 pounds from the 5.1 pounds in 1985.

In addition to consumption of commercially caught fish and shellfish, recreational fishermen caught and consumed an estimated 3 to 4 pounds of edible meat per person.

PER CAPITA USE. The per capita use of all fishery products (edible and industrial) was 59.5 pounds (round weight) -- down 3.5 pounds compared with 1985. Lower landings and imports of industrial of fishery products in 1986 accounted for most of the decrease.

PROCESSED FISHERY PRODUCTS

FRESH AND FROZEN

FISH FILLETS AND STEAKS. In 1986 the U.S. production of raw (uncooked) fish fillets and steaks was 260.2 million pounds—14.7 million pounds more than the 245.5 million pounds in 1985. These fillets and steaks were valued at $538.6 million—$98.5 million more than the record set in 1985, when fish fillets and steaks were valued at $440.1 million. Cod fillets led all species with 62.7 million pounds--24 percent of the total. Production of groundfish fillets and steaks (cod, cusk, haddock, hake, Atlantic ocean perch, and Atlantic pollock) was 92.7 million pounds compared with 83.9 million pounds in 1984.

FISH STICKS AND PORTIONS. The combined production of fish sticks and portions was 428.7 million pounds valued at $491.9 million compared with a 1985 production of 426.6 million pounds valued at $478.9 million.

The total production of fish sticks amounted to 72.6 million pounds valued at $80.3 million--decreases of 23.6 million pounds in quantity, and $31.0 million in value compared with 1985. Production of breaded cooked fish sticks decreased 6.7 million pounds, breaded raw increased 93 thousand pounds, and batter coated cooked decreased 17.0 million pounds. The total production of fish portions amounted to 356.0 million pounds valued at $411.7 million--an increase of 25.7 million pounds in quantity and $43.9 million in value compared with 1985. Production of batter coated portions decreased by 8.8 million pounds, breaded raw increased 32.2 million pounds and unbreaded decreased 525 thousand pounds.

BREADED SHRIMP. The 32 plants reporting production on a quarterly basis during 1986 produced 105.3 million pounds valued at $348.6 million, while the plants which reported during 1985 produced 95.3 million pounds valued at $354.8 million. Plants which report production on a quarterly basis account for about 90 percent of the total 1986 production.

FROZEN FISHERY TRADE. In 1986 stocks of frozen fishery products in cold storage were at a low of 259.0 million pounds on March 31 and a high of 363.8 million pounds on November 30. Cold storage holdings of shrimp products were at a high of 63.3 million pounds on November 30, and a low of 31.6 million pounds on May 31. Saltwater fillets and steaks holdings reached a high of 62.3 million pounds on January 30, and were at a low of 48.0 million pounds on March 31. Holdings of blocks and slabs were at a high of 49.0 million pounds on August 31, and at a low of 29.4 million pounds on February 28. King crab holdings were 8.2 million pounds on January 31, but reached a low of 2.2 million pounds on July 31, 1985. Cold Storage holdings were down every month in 1986 compared to 1985, resulting in a 7 percent annual decline. This decline in holdings of frozen fishery products was a direct result of a decline in domestic commercial landings, at a time when consumer demand for fishery products is at its higest level ever.

REVIEW

PROCESSED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS

CANNED FISHERY PRODUCTS. The pack of canned fishery products in the 50 States, American Samoa, and Puerto Rico was 50.1 million standard cases (1.3 billion pounds) valued at $1.5 billion--an increase of 6.2 million standard cases (168.8 million pounds), and $134.1 million compared with the 1985 pack. The 1986 pack included 43.4 million standard cases (1.0 billion pounds) valued at $1.4 billion for human consumption, and 6.7 million standard cases (321.2 million pounds) valued at $100.5 million for bait and animal food.

CANNED SALMON. The 1986 U.S. pack of natural Pacific salmon was 2.9 million standard cases (141.9 million pounds) valued at $265.5 million, compared with 3.3 million standard cases (158.9 million pounds) valued at $227.6 million packed a year earlier. Alaskan plants accounted for 92 percent in quantity and 95 percent in value of the salmon pack.

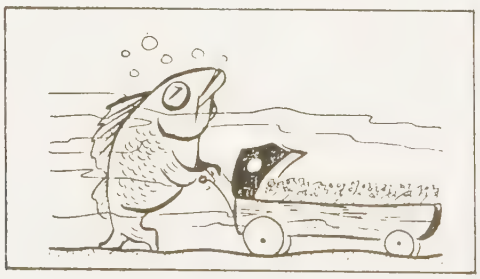
CANNED SARDINES. The pack of Maine sardines (sea herring) was 666,701 standard cases (15.6 million pounds) valued at $27.7 million, a decrease of 188,692 standard cases (4.4 million pounds) and $10.0 million compared with 1985. An additional 140,635 standard cases (6.8 million pounds) of herring valued at $10.9 million were packed in 1986--78,175 standard cases (3.8 million pounds) and $5.4 million more than the 1985 pack.

CANNED TUNA. The U.S. pack of tuna was 32.7 million standard cases (636.8 million pounds) valued at $881.5 million--an increase of 4.7 million standard cases (91.8 million pounds) in quantity, and $60.7 million compared with the 1985 pack. The pack of albacore tuna was 8.1 million standard cases--1.3 million standard cases more than the 6.8 million standard cases produced in 1985. Albacore tuna was 25 percent of the tuna pack in 1986. Lightmeat tuna (bigeye, bluefin, skipjack, and yellowfin) comprised the remainder with a pack of 24.6 million standard cases--3.4 million standard cases more than the 21.2 million standard cases packed in 1985. Plants in the United States packed 6 percent of the total and plants in American Samoa and Puerto Rico packed the remainder. About 25 percent of the total U.S. supply of canned tuna was packed from U.S.-caught fish, and 48 percent from imported fish. Imports of canned tuna made up the remaining 27 percent.

CANNED CLAMS. The U.S. pack of clams (whole, minced, chowder, and juice) was 4.4 million standard cases (116.1 million pounds) valued at $117.4 million -- 90,597 standard cases (875,000 pounds) less in quantity but $8.0 million more in value than the pack in 1985. The pack of whole and minced clams of 1.4 million standard cases (239,488 standard cases less than the 1985 pack) accounted for 32 percent of the total clam pack. Clam chowder and clam juice (2.7 million standard cases) made up the majority of the remaining pack.

CANNED SHRIMP. The U.S. pack of natural shrimp was 679,540 standard cases (4.6 million pounds) valued at $23.1 million--an increase of 86,761 standard cases (586 thousand pounds) and $4.2 million compared with the 1985 pack.

OTHER CANNED ITEMS. The U.S. pack of mackerel was 376,109 standard cases (18.1 million pounds) valued at $6.8 million--an increase of 35,600 standard cases (2.7 million pounds) and $156 thousand compared to the previous year. Tunalike fish (bonito) and natural oysters were packed by less than three firms in 1986. The pack of pet food (10 pounds or more of fish per standard case of 48 one-pound cans) was 6.7 million standard cases valued at $99.7 million--an increase of 1.5 million standard cases and $10.2 million compared with the pack in 1985.



REVIEW

PROCESSED FISHERY PRODUCTS
INDUSTRIAL FISHERY PRODUCTS

INDUSTRIAL FISHERY PRODUCTS. The value of the domestic production of industrial fishery products was $174.5 million--a decrease of $8.0 million (4 percent) compared with the 1985 value of $182.5 million. The three leading States were Louisiana ($86.1 million), Mississippi ($21.7 million), and Maine ($21.4 million), which accounted for 74 percent of the total U.S. value for 1986.

FISH MEAL AND SCRAP. The domestic production of fish meal and scrap (including shellfish) was 702.3 million pounds valued at $83.4 million--a decrease of 19.3 million pounds (3 percent) from 1985 volume and a decrease of $420,000 (less than 1 percent) in value compared to 1985. Menhaden meal production was 592.5 million pounds valued at $73.1 million--a decrease of 22.5 million pounds (4 percent) and $322,000 million (less than 1 percent) compared to 1985. Menhaden accounted for 87 percent of the 1986 production of fish meal and scrap. Shellfish meal production was 23.1 million pounds--an increase of 5.9 million pounds (35 percent) from the 1985 level. Tuna and mackerel meal production was 74.2 million pounds--an increase of 5.3 million pounds (8 percent) from 1985. Production of unclassified meal (consisting mainly of alewives, anchovy, carp, sea herring, and unclassified fish) was 12.5 million pounds--a decrease of 8.1 million pounds (39 percent) compared with 1985. Anchovy meal production in 1986 has been included with unclassified meal for reasons of confidentiality.

FISH SOLUBLES. Domestic production of fish solubles was 195.1 million pounds, 127.9 million pounds (40 percent) less than the 1985 production. Menhaden solubles accounted for more than 95 percent of the total production.

FISH OILS. The domestic production of fish oils was 336.8 million pounds valued at $43.7 million--an increase of 51.7 million pounds (18 percent) and $1.8 million (4 percent) compared with 1985 production. The production of menhaden oil was 332.0 million pounds valued at $43.3 million--an increase of 53.7 million pounds (19 percent) and $2.1 million (5 percent) compared with 1985 levels. Menhaden oil accounted for 99 percent of the volume and the value of the total 1986 fish oil production.

Unclassified oil production decreased by 1.9 million pounds. The 1986 anchovy, tuna, and mackerel oil production is included with unclassified oil for reasons of confidentiality.

OTHER INDUSTRIAL PRODUCTS. Oyster shell products, together with agar-agar, animal feeds, crab and clam shells processed for food serving, fish pellets, Irish moss extracts, kelp products, dry and liquid fertilizers, pearl essence, shark leathers, and mussel shell buttons were valued at $35.8 million, compared with $37.8 million in 1985--a decrease of $2.0 million (5 percent).

FOREIGN TRADE IN FISHERY PRODUCTS

IMPORTS. U.S. imports of edible fishery products in 1986 were valued at a record $4.8 billion, $771.8 million higher than the previous record for value established in 1985. The quantity of edible imports was a record 3.0 billion pounds, 224.9 million pounds more than the previous record quantity imported in 1985. The quantity of shrimp imported in 1986 established a record with 400.1 million pounds, 41.2 million pounds more than the previous record quantity imported in 1985. Valued at $1.4 billion, $281.4 million more than the 1985 value, shrimp imports accounted for 30 percent of the value of total edible imports. Imports of fresh and frozen tuna 563.6 million pounds, increased 86.3 million pounds more than the 478.8 million pounds imported in 1985. Imports of canned tuna, not in oil, continued to increase with a record 236.3 million pounds, an increase of 22.7 million pounds over the previous record year of 1985. Imports of fresh and frozen fillets and steaks amounted to a record 538.5 million pounds, an increase of 1.8 million pounds over 1985. Regular and minced block imports were 363.9 million pounds, an increase of 29.8 million pounds from 1985. Edible imports consisted of 2.4 billion pounds of fresh and frozen products valued at $4.2 billion, 438.8 million pounds of canned products valued at $500.4 million, 68.1 million pounds of cured products valued at $80.0 million, and 14.0 million pounds of other products valued at $24.6 million. Analog products, with shellfish, amounted to 34.3 million pounds valued at $58.5 million in 1986, compared to 33.7 million pounds valued at $48.2 million in 1985.

Imports of nonedible fishery products were valued at a record $2.8 billion -- $198.6 million more than the $2.6 billion imported one year earlier. Total value of edible and nonedible products resulted in a record import value of $7.6 billion in 1986 -- $947.7 million more than the previous record in 1985, when $6.7 billion of fishery products were imported.

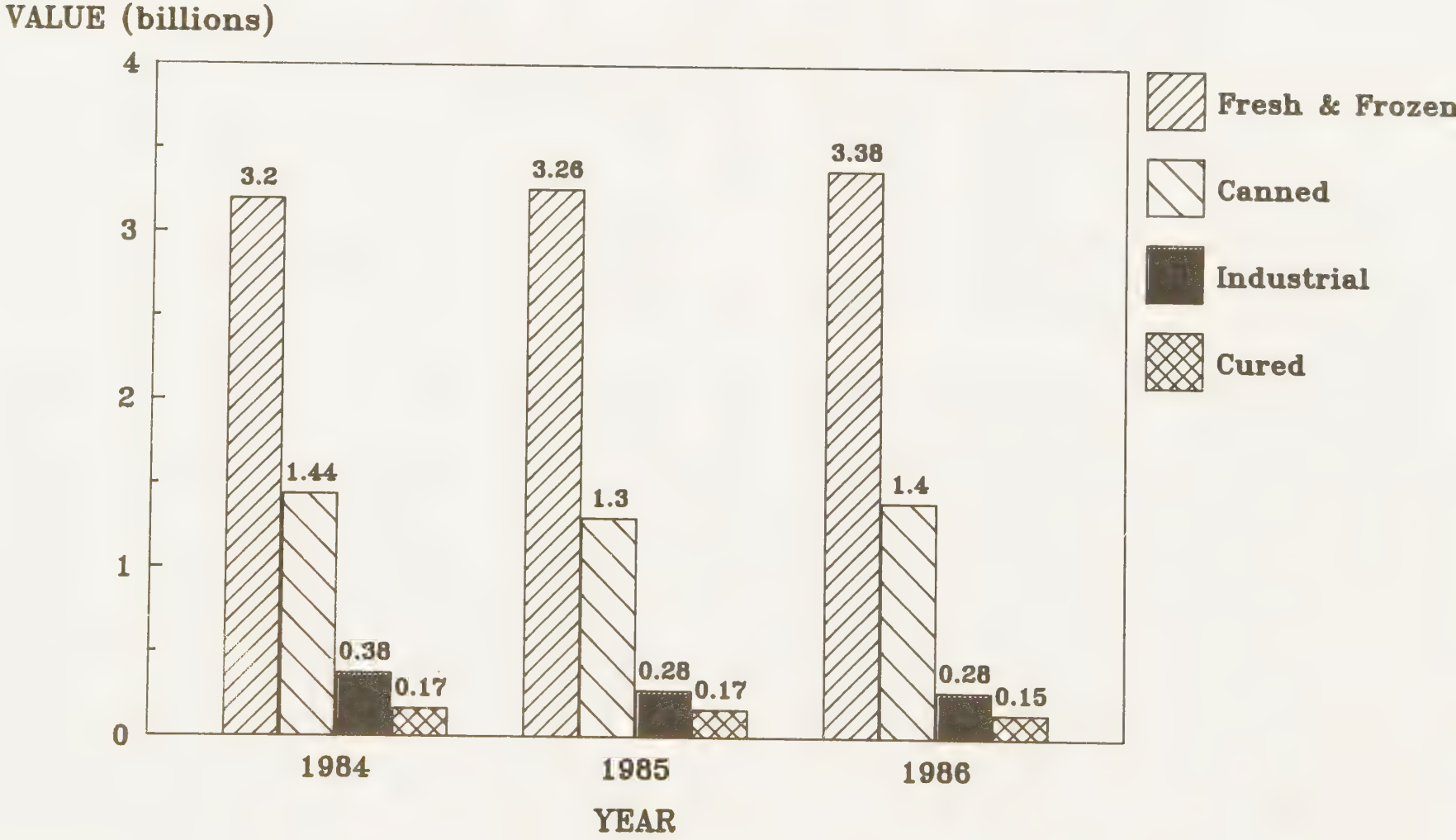
EXPORTS. U.S. exports of edible fishery products of domestic origin were a record 735.0 million pounds valued at a record $1.3 billion, compared with 648.1 million pounds valued at $1.0 billion exported in 1985. Fresh and frozen items were 615.5 million pounds valued at $1.0 billion, increases of 71.2 million pounds and $260.2 million compared with 1985. Fresh and frozen exports consisted principally of 293.5 million pounds of salmon valued at $552.3 million and 90.4 million pounds of herring valued at $70.2 million. Canned items were 79.6 million pounds valued at $132.2 million, up 21.1 million pounds and $35.8 million from 1985 levels. Salmon was the major canned item exported , with 59.4 million pounds valued at $101.2 million. Cured items were 39.4 million pounds valued at $112.9 million, decreases of 5.4 million pounds and $16.6 million compared with 1985. Cured exports consisted mainly of salmon and herring roe, which amounted to 29.8 million pounds valued at $91.2 million. The $154.9 million received for U.S.-Flag vessel catches transferred onto foreign vessels in the U.S. FCZ in joint venture operations are not included in the export statistics.

Exports of nonedible products were valued at $66.3 million -- $7.5 million less than the $73.8 million exported in 1985. Exports of menhaden oil amounted to 188.9 million pounds valued at $19.8 million, decreases of 89.3 million pounds and $16.2 million compared to 1985. Thus, menhaden oil exports accounted for 29.9 percent of the value of total nonedible exports in 1986. The total value of edible and nonedible exports was $1.4 billion -- an increase of $272.0 million compared with 1985.

VALUE OF PROCESSED FISHERY PRODUCTS

FROM DOMESTIC CATCH AND IMPORTED PRODUCTS

1984 – 1986



U.S. COMMERCIAL LANDINGS

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1985 AND 1986 (1)

Species	1985		1986		5-year average (1981-85)
Fish	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds
Alewives:					
Atlantic and Gulf	13,751	1,020	10,064	946	10,878
Great Lakes	24,347	561	19,218	488	20,528
Anchovies	14,566	2,704	13,436	2,523	56,917
Bluefish	13,743	2,363	13,968	2,413	15,234
Bonito	5,418	557	724	148	8,603
Butterfish	10,338	3,537	9,880	6,576	14,493
Cod:					
Atlantic	82,823	35,140	61,134	36,142	99,395
Pacific	120,275	18,556	104,443	11,337	91,875
Croaker	11,088	3,658	12,382	3,883	12,412
Cusk	5,209	1,492	4,148	1,775	4,342
Flounders:					
Atlantic and Gulf:					
Blackback	23,286	19,463	17,253	16,898	32,194
Fluke	35,121	33,183	30,072	35,923	32,193
Yellowtail	24,559	20,286	22,910	21,041	43,766
Other	44,513	35,080	35,127	31,736	44,519
Pacific	68,239	21,109	63,688	18,988	67,054
Total	195,718	129,121	169,050	124,586	219,727
Groupers	12,368	18,359	11,482	18,680	12,777
Haddock	14,416	13,545	10,968	10,911	34,627
Hake:					
Pacific (whiting)	16,316	792	25,615	1,182	15,046
Red	4,015	540	4,630	671	4,803
White	16,249	3,348	14,591	4,912	14,242
Halibut	61,032	38,376	77,691	82,925	42,869
Herring, sea:					
Atlantic	57,133	2,978	79,381	4,314	78,850
Pacific	142,074	47,025	130,764	44,598	122,658
Jack mackerel	20,852	1,770	23,672	1,775	34,529
Lingcod	8,946	2,318	5,738	1,726	8,740
Mackerel:					
Atlantic	6,529	1,002	9,353	1,210	6,617
King	5,328	5,396	5,482	5,719	6,545
Pacific	75,453	6,324	85,444	6,408	77,769
Spanish	5,811	1,687	6,456	1,933	6,111
Menhaden:					
Atlantic	791,576	33,227	564,816	26,260	842,458
Gulf	1,947,825	67,453	1,826,547	67,502	1,850,493
Total	2,739,401	100,680	2,391,363	93,762	2,692,952
Mullet	21,205	5,720	21,646	6,043	26,864
Ocean perch:					
Atlantic	9,666	3,179	6,576	3,160	14,539
Pacific	9,034	1,757	15,585	3,116	6,921
Pollock:					
Atlantic	43,477	6,978	54,469	14,044	36,503
Alaska	92,833	5,409	130,424	7,167	25,399
Rockfishes	82,109	23,107	92,029	28,265	102,666
Sablefish	63,380	28,692	84,868	45,879	45,757
Salmon, Pacific:					
Chinook or king	27,187	43,090	30,845	50,630	27,799
Chum or keta	92,499	36,191	86,459	34,589	95,332

See notes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1985 AND 1986 (1) - Continued

Species	1985		1986		5-year average (1981-85)
Fish - continued	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds
Salmon, Pacific - cont.:					
Pink	319,139	75,307	268,646	55,325	253,494
Red or sockeye	236,077	239,378	212,212	305,407	240,447
Silver or coho	52,044	45,829	60,359	47,986	45,629
Total	726,946	439,795	658,521	493,937	662,702
Scup or porgy	15,996	9,338	16,181	9,476	19,108
Sea bass:					
Black	4,049	3,794	4,664	4,449	4,066
White	124	241	97	196	230
Sea trout:					
Gray	16,400	7,330	20,602	7,086	19,860
Spotted	2,413	2,473	3,422	3,028	3,382
White	597	285	620	286	744
Sharks:					
Dogfish	11,563	842	11,114	964	13,979
Other	5,631	4,013	5,928	4,318	5,090
Snapper:					
Red	5,181	10,661	4,489	9,820	5,973
Other	4,257	7,492	4,418	7,599	3,768
Striped bass	1,201	1,649	335	338	2,322
Swordfish	12,258	33,191	9,671	30,508	11,174
Tilefish	5,598	6,502	5,985	7,275	6,835
Tuna:					
Albacore	18,072	9,755	11,368	6,087	23,134
Bigeye	875	2,385	1,384	5,092	1,565
Bluefin	9,838	12,410	10,687	6,791	5,873
Skipjack	13,225	5,450	5,103	3,237	89,443
Yellowfin	40,343	21,755	58,128	32,126	114,110
Unclassified	701	760	1,141	1,242	948
Total	83,054	52,515	87,811	54,575	235,227
Whiting	44,545	8,274	39,924	8,312	40,065
Other marine finfishes:					
Atlantic and Gulf	133,035	35,718	161,946	47,197	-
Pacific	15,357	7,806	20,339	4,799	-
Other freshwater finfishes	121,245	43,827	108,022	40,754	-
Total Fish	5,214,363	1,193,427	4,870,763	1,319,134	-
Shellfish et al.					
Clams:					
Hard	16,697	51,308	11,793	46,808	15,321
Ocean quahog	51,964	15,874	45,383	15,716	39,381
Soft	7,865	21,500	5,887	18,435	8,067
Surf	72,520	38,877	78,749	42,613	58,904
Other	1,505	790	3,581	11,338	3,889
Total	150,551	128,349	145,393	134,910	125,563
Crabs:					
Blue, hard	190,524	53,603	184,491	58,005	194,885
Dungeness	28,282	39,295	22,408	29,107	30,090
King	15,363	40,269	25,909	87,655	36,939
Snow (tanner)	85,742	51,527	110,000	83,408	74,365
Other	17,721	18,350	12,852	11,963	16,357
Total	337,632	203,044	355,660	270,138	352,635

See notes at end of table.

(Continued)

U.S. COMMERCIAL LANDINGS, BY SPECIES, 1985 AND 1986 (1) - Continued

Species	1985		1986		5-year average (1981-85)
Shellfish et al. continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds
Lobsters:					
American	46,152	114,893	46,053	120,556	42,253
Spiny	5,311	14,299	6,775	19,247	5,978
Oysters	44,173	70,053	40,544	78,068	49,400
Scallops:					
Bay	1,331	5,938	735	6,527	1,569
Calico	12,513	12,524	1,616	3,087	17,420
Sea	15,829	74,562	19,992	97,415	21,267
Shrimp:					
New England	9,247	4,045	10,328	6,520	5,097
South Atlantic	27,970	54,420	23,120	59,513	23,172
Gulf	262,908	398,694	304,051	563,045	238,747
Pacific	33,509	15,514	62,686	33,666	37,535
Other	57	177	-	-	130
Total	333,691	472,850	400,185	662,744	304,680
Squid:					
Atlantic	26,586	7,256	33,145	10,279	22,990
Pacific	22,276	4,047	42,262	4,368	22,507
Other shellfish	47,234	24,995	67,511	36,350	-
Total shellfish et al.	1,043,279	1,138,810	1,159,871	1,443,689	-
Grand total	6,257,642	2,326,237	6,030,634	2,762,823	-

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).

Note:-- Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" table on page 8. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS, BY REGIONS, 1985 AND 1986 (1)

Region	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
New England	589,792	419,416	563,495	449,059
Middle Atlantic	151,162	100,695	155,942	113,616
Chesapeake	814,589	123,953	617,070	130,860
South Atlantic	310,720	156,330	248,634	154,681
Gulf	2,412,485	596,806	2,367,870	781,235
Pacific Coast and Alaska	1,816,315	862,627	1,922,989	1,065,372
Great Lakes	54,027	14,909	48,169	13,757
Hawaii	16,987	22,022	10,590	20,082
Other	91,565	29,479	95,875	34,161
Total	6,257,642	2,326,237	6,030,634	2,762,823

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).

Note:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" table on page 8. Data do not include aquaculture products, except oysters and clams.

U.S. COMMERCIAL LANDINGS

U.S. COMMERCIAL LANDINGS, BY STATES, 1985 AND 1986 (1)

State	1985		1986		Record landings	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Year	Thousand pounds
Alabama (2)	29,559	40,664	36,690	63,988	1973	39,749
Alaska	1,184,807	590,751	1,236,062	752,417	1986	1,236,062
California	362,765	132,935	386,740	139,205	1936	1,760,193
Connecticut	6,734	11,864	6,703	15,546	1930	88,012
Delaware	4,793	2,289	4,829	1,999	1953	367,500
Florida	182,577	171,073	166,577	154,501	1938	241,443
Georgia	17,241	20,887	15,476	24,501	1927	47,607
Hawaii	16,987	22,022	10,590	20,082	1984	34,824
Illinois (2)	6,562	2,151	6,742	2,054	-	(3)
Indiana	1,070	1,443	959	896	-	(3)
Louisiana	1,704,498	229,134	1,699,321	321,514	1984	1,931,027
Maine	175,460	100,919	174,932	108,720	1950	356,266
Maryland	91,931	47,418	88,831	51,450	1890	141,607
Massachusetts	296,222	231,522	272,393	243,524	1948	649,696
Michigan	17,196	7,515	15,750	7,056	1930	35,580
Minnesota (2)	12,645	3,859	13,256	3,998	-	(3)
Mississippi (2)	470,648	40,136	418,409	45,581	1984	476,997
New Hampshire	7,606	5,263	7,925	6,180	-	(3)
New Jersey	107,785	60,844	108,259	66,665	1956	540,060
New York	39,233	38,005	43,628	45,482	1880	335,000
North Carolina	214,871	64,589	168,885	63,435	1981	432,006
Ohio	3,356	628	3,470	734	1936	31,083
Oregon	101,257	45,926	113,431	62,403	1978	134,657
Pennsylvania	305	111	324	158	-	(3)
Rhode Island	103,770	69,848	101,542	75,089	1889	128,056
South Carolina	12,827	13,941	16,788	25,064	1965	26,611
Texas	102,691	177,147	116,493	246,122	1960	237,684
Virginia	722,658	76,535	528,239	79,410	1941	751,069
Washington	167,486	93,015	186,756	111,347	-	197,253
Wisconsin (2)	46,944	6,843	43,246	6,800	-	(3)
Other (2)	280,263	9,407	20,041	9,203	-	(3)
Total	6,257,642	2,326,237	6,030,634	2,762,823	1980	6,482,354

(1) Landings are reported in round (live) weight for all items except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell).
(2) Estimated State landings from the Mississippi River and its tributaries are included in "other."
(3) Not available.

Note:--Data are preliminary. Data do not include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States, or catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint venture). Therefore, they will not agree with "U.S. Commercial Landings" table on page 8. Data do not include aquaculture products, except oysters and clams.

COMMERCIAL FISHERY LANDINGS AND VALUE AT MAJOR U.S. PORTS, 1984-86

Port	Quantity			Port	Value		
	1984	1985	1986		1984	1985	1986
	- -Million Pounds- -				- -Million Dollars- -		
Cameron, LA	679.2	673.6	616.8	New Bedford, MA	107.7	103.2	106.0
Pascagoula-Moss Point, MS	425.3	423.2	365.5	Dulac-Chauvin, LA	59.7	59.9	71.0
Empire-Venice, LA	383.5	224.5	317.6	Kodiak, AK	69.9	65.8	70.2
Intercoastal City, LA	(1)	(1)	298.9	Brownsville-Port Isabel, TX	51.0	49.6	69.3
Dulac-Chauvin, LA	327.2	398.6	294.6	Aransas Pass-Rockport, TX	51.1	43.0	60.3
Los Angeles, CA	237.0	150.3	187.4	Empire-Venice, LA	41.6	34.3	47.1
Kodiak, AK	113.6	96.1	124.0	Bayou La Batre, AL	31.5	30.4	43.3
Gloucester, MA	179.1	116.5	110.0	Golden Meadow-Leeville, LA	23.6	23.5	40.0
Beaufort-Morehead City, NC	185.3	133.2	98.9	Petersburg, AK	24.9	(1)	38.1
Dutch Harbor-Unalaska, AK	46.9	106.3	88.3	Gloucester, MA	37.1	37.1	37.8
Petersburg, AK	54.1	(1)	85.2	Dutch Harbor-Unalaska, AK	20.3	21.3	37.1
New Bedford, MA	99.5	90.6	65.8	Cameron, LA	38.2	29.9	34.8
Point Judith, RI	69.9	56.8	52.1	Port Arthur, TX	(1)	29.9	34.8
Biloxi, MS	50.8	41.1	46.7	Los Angeles, CA	84.6	32.5	29.5
Bellingham, WA	34.0	38.8	45.9	Bellingham, WA	14.9	16.6	28.8
Rockland, ME	42.9	58.6	43.2	Point Judith, RI	27.3	28.0	28.5
Ketchikan, AK	(1)	(1)	42.2	Delcambre, LA	14.9	12.7	28.4
Seattle, WA	60.3	42.2	38.2	Key West, FL	21.8	23.3	27.4
Astoria, OR	23.1	25.5	36.8	Freeport, TX	19.1	17.2	26.7
Cape May-Wildwood, NJ	34.1	30.3	36.6	Beaufort-Morgan City, NC	21.6	22.7	24.7
Portland, ME	37.0	36.1	34.9	Lafitte-Barataria, LA	24.1	29.0	24.1
Boston, MA	20.2	19.8	31.4	Hampton Roads Area, VA	29.5	22.5	23.6
Port Hueneme, Oxnard, and Ventura, CA	9.4	19.9	31.0	Portland, ME	14.5	17.2	22.4
Ocean City, MD	24.4	24.5	29.1	Seattle, WA	16.5	18.7	21.8
Wanchese-Stumpy Point, NC	28.1	22.7	27.2	Sitka, AK	26.8	(1)	21.8
Aransas Pass-Rockport, TX	25.2	24.2	27.1	Galveston, TX	20.1	13.4	20.9
Newport, OR	25.7	29.4	26.7	Cape May-Wildwood, NJ	21.4	18.1	20.9
San Francisco Area, CA	22.4	31.0	25.9	Ketchikan, AK	(1)	(1)	20.6
Bayou La Batre, AL	18.2	21.0	25.6	Pascagoula-Moss Point, MS	25.0	18.4	20.4
Brownsville-Port Isabel, TX	23.0	22.9	25.5	Boston, MA	11.2	12.1	19.1
Sitka, AK	39.8	(1)	25.2	Astoria, OR	9.2	9.5	16.4
Golden Meadow-Leeville, LA	16.2	18.2	25.1	Cape Canaveral, FL	26.2	21.2	15.9
Hampton Roads Area, VA	33.3	24.4	24.8	Biloxi, MS	20.7	13.4	15.2
Coos Bay-Charleston, OR	20.1	25.6	24.3	Newport, OR	9.5	12.8	13.5
Westport, WA	15.0	12.8	22.9	Bon Secour-Gulf Shores, AL	11.5	10.2	13.5
Atlantic City, NJ	28.8	21.9	22.0	Montauk, NY	9.7	8.9	12.8
Cresent City, CA	15.9	19.8	20.9	Newport,RI	(1)	13.7	12.8
Eureka, CA	22.5	28.5	19.4	Atlantic City, NJ	14.4	11.9	12.7
Delcambre, LA	8.6	7.7	18.7	Delacroix-Yscloskey, LA	10.8	10.6	12.5
Ilwaco-Chinook, WA	10.6	7.0	18.3	Apalachicola, FL	13.2	12.4	12.4
Fort Bragg, CA	12.7	16.0	17.8	Ocean City, MD	11.0	11.1	12.3
Morgan City-Berwick, LA	(1)	7.7	17.4	Wanchese-Stumpy Point, NC	10.8	13.3	12.3
Lafitte-Barataria, LA	12.5	20.6	16.8	Grand Isle, LA	11.0	12.4	11.9
Monterey, CA	30.3	18.2	16.4	Coos Bay-Charleston, OR	6.4	10.4	11.9
Delacroix-Yscloskey, LA	10.8	11.0	16.3	Fort Myers, FL	13.9	15.4	11.5
Key West, FL	17.7	15.3	15.4	Westport, WA	6.6	9.8	11.3
Blaine, WA	12.5	18.7	14.3	Intercoastal City, LA	(1)	(1)	11.3
Grand Isle, LA	9.2	11.1	14.0	Blaine, WA	6.9	12.3	11.1
Chincoteague, VA	9.3	12.2	13.9	San Francisco Area, CA	9.2	12.5	11.1
Santa Barbara, CA	10.1	10.7	13.7	Cresent City, CA	7.0	8.1	10.6

(1) Not available. Record quantity was 848.2 million lb landed in Los Angeles, California in 1960, and value $132.9 million in 1981 at Kodiak, Alaska.

NOTE:--Data for some ports are estimated. To avoid disclosure of private enterprise, Reedville, Va. is not included.

U.S. COMMERCIAL LANDINGS OF FISH AND SHELLFISH, 1977-86 (1)

Year	Landings for human food		Landings for industrial products (2)		Total	
	Million pounds	Million dollars	Million pounds	Million dollars	Million pounds	Million dollars
1977	2,952	1,440	2,319	114	5,271	1,554
1978 (3)	3,177	1,733	2,851	121	6,028	1,854
1979 (3)	3,318	2,093	2,949	141	6,267	2,234
1980 (3)	*3,654	2,092	2,828	145	*6,482	2,237
1981 (3)	3,547	2,277	2,430	111	5,977	2,388
1982 (3)	3,285	2,247	3,082	143	6,367	2,390
1983 (3)	3,238	2,203	*3,201	152	6,439	2,355
1984 (3)	3,320	2,206	3,118	144	6,438	2,350
1985 (3)	3,294	2,198	2,964	128	6,258	2,326
1986 (3)	3,393	2,641	2,638	122	6,031	2,763

(1) Statistics on landings are shown in round weight for all items except univalve and bivalve mollusks such as clams, oysters, and scallops, which are shown in weight of meats (excluding the shell). (2) Processed into fish meal, oil, solubles, and shell products, or used as bait or animal food. (3) Data are preliminary.

Note:--Data are preliminary. Data do not include landings by U.S. flag vessels at Puerto Rico and other ports outside the 50 states, or catches by U.S. - flag vessels unloaded onto foreign vessels within the U.S. EEZ (joint ventures). Data do not include aquaculture products, except oyster and clams. Joint venture catches are included in 1979. *Record.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, 1985 AND 1986

End Use	1985		1986	
	Million pounds	Percent	Million pounds	Percent
Fresh and frozen:				
For human food	2,081	33.2	2,328	38.6
For bait and animal food	161	2.6	162	2.7
Total	2,242	35.8	2,490	41.3
Canned:				
For human food	1,143	18.3	1,005	16.6
For bait and animal food	89	1.4	126	2.1
Total	1,232	19.7	1,131	18.7
Cured for human food	70	1.1	60	1.0
Reduction to meal, oil, etc.	2,714	43.4	2,350	39.0
Grand total	6,258	100.0	6,031	100.0

Note:--Data are preliminary.

DISPOSITION OF U.S. COMMERCIAL LANDINGS, BY MONTHS, 1986

Month	Landings for human food		Landings for industrial products (1)		Total	
	Million pounds	Percent	Million pounds	Percent	Million pounds	Percent
January	157	4.6	17	.6	174	2.9
February	182	5.4	18	.7	200	3.3
March	215	6.3	19	.7	234	3.9
April	296	8.7	123	4.7	419	6.9
May	372	10.9	367	13.9	739	12.3
June	272	8.0	450	17.1	722	12.0
July	562	16.6	494	18.7	1,056	17.5
August	525	15.5	499	18.9	1,024	17.0
September	268	7.9	419	15.9	687	11.4
October	216	6.4	172	6.5	388	6.4
November	176	5.2	32	1.2	208	3.4
December	152	4.5	28	1.1	180	3.0
Total	3,393	100.0	2,638	100.0	6,031	100.0

(1) Processed into fish meal, oil, solubles, and shell products, or used as bait and animal food.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1)

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Alewives:								
Atlantic and Gulf.	9,843	881	221	65	-	-	10,064	946
Great Lakes. . . .	19,218	488	-	-	-	-	19,218	488
Anchovies.	1,397	272	12,039	2,251	-	-	13,436	2,523
Bluefish	9,714	1,705	4,254	708	-	-	13,968	2,413
Bonito	89	32	635	116	-	-	724	148
Butterfish	757	386	9,123	6,190	-	-	9,880	6,576
Cod:								
Atlantic	1,704	1,107	58,276	34,429	1,154	606	61,134	36,142
Pacific.	15,796	1,737	234,184	24,049	-	-	249,980	25,786
Croaker.	11,396	3,552	986	331	-	-	12,382	3,883
Cusk	8	3	4,056	1,740	84	32	4,148	1,775
Flounders:								
Atlantic and Gulf:								
Blackback. . . .	3,438	2,629	13,738	14,200	77	69	17,253	16,898
Fluke.	10,212	11,945	19,860	23,978	-	-	30,072	35,923
Yellowtail . . .	736	737	16,525	16,345	5,649	3,959	22,910	21,041
Other.	2,275	1,625	27,833	26,655	5,019	3,456	35,127	31,736
Pacific.	21,603	4,296	518,009	43,539	-	-	539,612	47,835
Total.	38,264	21,232	595,965	124,717	10,745	7,484	644,974	153,433
Groupers	205	344	11,277	18,336	-	-	11,482	18,680
Haddock.	3	4	10,866	10,803	99	104	10,968	10,911
Hake:								
Pacific (whiting).	18,027	746	187,569	9,172	-	-	205,596	9,918
Red.	223	32	4,404	639	3	(4)	4,630	671
White.	13	3	13,557	4,559	1,021	350	14,591	4,912
Halibut.	29,593	31,692	48,075	51,185	23	48	77,691	82,925
Herring, sea:								
Atlantic	54,210	2,993	25,171	1,321	-	-	79,381	4,314
Pacific.	129,693	44,171	1,071	427	-	-	130,764	44,598
Jack mackerel. . . .	-	-	23,672	1,775	-	-	23,672	1,775
Lingcod.	1,179	344	4,559	1,382	-	-	5,738	1,726
Mackerel:								
Atlantic	1,163	245	8,190	965	-	-	9,353	1,210
King	848	939	4,634	4,780	-	-	5,482	5,719
Pacific.	-	-	85,444	6,408	-	-	85,444	6,408
Spanish.	2,140	812	4,316	1,121	-	-	6,456	1,933

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Menhaden:								
Atlantic	564,157	26,226	659	34	-	-	564,816	26,260
Gulf	1,005,217	37,512	821,330	29,990	-	-	1,826,547	67,502
Total	1,569,374	63,738	821,989	30,024	-	-	2,391,363	93,762
Mullet	21,640	6,041	6	2	-	-	21,646	6,043
Ocean perch:								
Atlantic	3	1	6,422	3,087	151	72	6,576	3,160
Pacific	4,883	709	11,304	2,479	-	-	16,187	3,188
Pollock:								
Atlantic	321	80	53,628	13,836	520	128	54,469	14,044
Alaska	19,768	1,097	2,103,859	101,364	-	-	2,123,627	102,461
Rockfishes	8,194	2,649	84,309	25,673	-	-	92,503	28,322
Sablefish	8,838	5,189	76,986	40,827	-	-	85,824	46,016
Salmon, Pacific:								
Chinook or king	21,336	31,589	9,509	19,041	-	-	30,845	50,630
Chum or keta	86,459	34,589	-	-	-	-	86,459	34,589
Pink	268,646	55,325	-	-	-	-	268,646	55,325
Red or sockeye	212,212	305,407	-	-	-	-	212,212	305,407
Silver or coho	52,812	40,586	7,547	7,400	-	-	60,359	47,986
Total	641,465	467,496	17,056	26,441	-	-	658,521	493,937
Scup or porgy	4,964	3,081	11,217	6,395	-	-	16,181	9,476
Sea bass:								
Black	757	1,061	3,907	3,388	-	-	4,664	4,449
White	43	87	54	109	-	-	97	196
Sea trout:								
Gray	17,362	6,188	3,240	918	-	-	20,602	7,086
Spotted	3,419	3,025	3	3	-	-	3,422	3,028
White	384	192	236	94	-	-	620	286
Sharks:								
Dogfish	6,778	668	4,336	296	-	-	11,114	964
Other	669	483	5,234	3,805	25	30	5,928	4,318
Snapper:								
Red	74	187	4,415	9,633	-	-	4,489	9,820
Other	549	958	3,869	6,641	-	-	4,418	7,599
Striped bass	329	325	6	13	-	-	335	338
Swordfish	255	769	7,710	24,262	1,706	5,477	9,671	30,508
Tilefish	-	-	5,985	7,275	-	-	5,985	7,275

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Tuna:								
Albacore	6	4	9,122	4,896	2,447	1,341	11,575	6,241
Bigeye	21	88	1,278	4,820	85	184	1,384	5,092
Bluefin	(4)	1	7,755	5,424	2,932	1,366	10,687	6,791
Skipjack	210	237	2,113	2,201	235,141	75,456	237,464	77,894
Yellowfin	277	402	11,370	14,792	281,117	104,780	292,764	119,974
Unclassified	75	16	728	999	338	227	1,141	1,242
Total	589	748	32,366	33,132	522,060	183,354	555,015	217,234
Whiting	1,742	431	38,325	7,890	1	(4)	40,068	8,321
Other marine finfishes	91,462	32,955	154,384	28,928	1,610	2,458	247,479	64,346
Other freshwater fishes	127,251	41,247	-	-	-	-	127,251	41,247
Total fish	2,876,619	753,110	4,803,390	683,984	539,202	200,143	8,219,211	1,637,237
Shellfish et al.								
Clams:								
Hard	11,793	46,808	-	-	-	-	11,793	46,808
Ocean quahog	1,795	2,568	43,588	13,148	-	-	45,383	15,716
Soft	5,887	18,435	-	-	-	-	5,887	18,435
Surf	23,804	11,089	54,945	31,524	-	-	78,749	42,613
Other	3,581	11,338	-	-	-	-	3,581	11,338
Total	46,860	90,238	98,533	44,672	-	-	145,393	134,910
Crabs:								
Blue, hard	184,491	58,005	-	-	-	-	184,491	58,005
Dungeness	16,923	21,878	5,485	7,229	-	-	22,408	29,107
King	697	2,160	25,212	85,495	-	-	25,909	87,655
Snow (tanner)	10,249	18,122	99,751	65,286	-	-	110,000	83,408
Other	4,468	3,046	8,350	8,906	34	11	12,852	11,963
Total	216,828	103,211	138,798	166,916	34	11	355,660	270,138

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Shellfish et al. - continued:	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Lobsters:								
American	39,143	98,976	6,785	21,113	125	467	46,053	120,556
Spiny	1,629	5,106	5,146	14,141	-	-	6,775	19,247
Oysters	40,544	78,068	-	-	-	-	40,544	78,068
Scallops:								
Bay	735	6,527	-	-	-	-	735	6,527
Calico	-	-	1,616	3,087	-	-	1,616	3,087
Sea	1,259	5,955	18,733	91,460	-	-	19,992	97,415
Shrimp:								
New England	1,186	695	9,142	5,825	-	-	10,328	6,520
South Atlantic	19,050	46,639	4,070	12,874	-	-	23,120	59,513
Gulf	169,321	220,142	134,730	342,903	-	-	304,051	563,045
Pacific Coast	9,412	4,535	53,222	29,130	-	-	62,634	33,665
Other	52	1	-	-	-	-	52	1
Total	199,021	272,012	201,164	390,732	-	-	400,185	662,744
Squid:								
Atlantic	8,524	2,956	24,621	7,323	-	-	33,145	10,279
Pacific	37	7	42,225	4,361	-	-	42,262	4,365
Other shellfish	65,694	33,265	10,470	4,827	3,946	7,261	80,110	45,353
Total shellfish et al.	620,274	696,321	548,091	748,632	4,105	7,739	1,172,470	1,452,692
Grand total, 1986	3,496,893	1,449,431	5,351,481	1,432,616	543,307	207,882	9,391,681	3,089,929
Grand total, 1985 (3)	4,511,679	1,297,729	3,686,533	1,095,529	505,983	209,560	8,704,195	2,602,818

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance from shore for Texas landings data collected by the Texas Parks and Wildlife Department.
(2) Includes landings from the Great Lakes and other inland waters.
(3) For individual species breakout see "Fisheries of the United States, 1985" pages 8-11.
(4) Less than 500 pounds or $500.

Note:--Data are preliminary. Data include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States and catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. FCZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" table on pages 1-3. Data do not include aquaculture products, except oysters and clams.

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1)

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Alewives:								
Atlantic and Gulf.	4,465	881	100	65	-	-	4,565	946
Great Lakes. . . .	8,717	488	-	-	-	-	8,717	488
Anchovies.	634	272	5,461	2,251	-	-	6,095	2,523
Bluefish	4,406	1,705	1,930	708	-	-	6,336	2,413
Bonito	40	32	288	116	-	-	328	148
Butterfish	342	386	4,138	6,190	-	-	4,482	6,576
Cod:								
Atlantic	773	1,107	26,434	34,429	523	606	27,730	36,142
Pacific.	7,165	1,737	106,225	24,049	-	-	113,390	25,786
Croaker.	5,169	3,552	447	331	-	-	5,616	3,883
Cusk	3	3	1,840	1,740	38	32	1,881	1,775
Flounders:								
Atlantic and Gulf:								
Blackback. . . .	1,559	2,629	6,231	14,200	34	69	7,824	16,898
Fluke.	4,632	11,945	9,009	23,978	-	-	13,641	35,923
Yellowtail . . .	334	737	7,496	16,345	2,562	3,959	10,392	21,041
Other.	1,031	1,625	12,625	26,655	2,277	3,456	15,933	31,736
Pacific.	9,799	4,296	234,967	43,539	-	-	244,766	47,835
Total.	17,355	21,232	270,328	124,717	4,873	7,484	292,558	153,433
Groupers	93	344	5,115	18,336	-	-	5,208	18,680
Haddock.	1	4	4,929	10,803	45	104	4,975	10,911
Hake:								
Pacific (whiting).	8,177	746	85,081	9,172	-	-	93,258	9,918
Red.	101	32	1,998	639	1	(4)	2,100	671
White.	6	3	6,149	4,559	463	350	6,618	4,912
Halibut.	13,423	31,692	21,807	51,185	10	48	35,240	82,925
Herring, sea:								
Atlantic	24,589	2,993	11,418	1,321	-	-	36,007	4,314
Pacific.	58,828	44,171	486	427	-	-	59,314	44,598
Jack mackerel. . . .	-	-	10,738	1,775	-	-	10,738	1,775
Lingcod.	535	344	2,068	1,382	-	-	2,603	1,726
Mackerel:								
Atlantic	528	245	3,715	965	-	-	4,243	1,210
King	385	939	2,102	4,780	-	-	2,487	5,719
Pacific.	-	-	38,757	6,408	-	-	38,757	6,408
Spanish.	971	812	1,958	1,121	-	-	2,929	1,933

See footnotes at end of table.

(Continued)

OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Fish - continued:	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Menhaden:								
Atlantic	255,899	26,226	299	34	-	-	256,198	26,260
Gulf	455,964	37,512	372,553	29,990	-	-	828,517	67,502
Total	711,863	63,738	372,852	30,024	-	-	1,084,715	93,762
Mullet	9,816	6,041	3	2	-	-	9,819	6,043
Ocean perch:								
Atlantic	1	1	2,914	3,087	68	72	2,983	3,160
Pacific	2,220	709	5,122	2,479	-	-	7,342	3,188
Pollock:								
Atlantic	146	80	24,325	13,836	236	128	24,707	14,044
Alaska	8,968	1,097	954,303	101,364	-	-	963,271	102,461
Rockfishes	3,718	2,649	38,241	25,673	-	-	41,959	28,322
Sablefish	4,010	5,189	34,920	40,827	-	-	38,930	46,016
Salmon, Pacific:								
Chinook or king	9,678	31,589	4,313	19,041	-	-	13,991	50,630
Chum or keta	39,217	34,589	-	-	-	-	39,217	34,589
Pink	121,856	55,325	-	-	-	-	121,856	55,325
Red or sockeye	96,258	305,407	-	-	-	-	96,258	305,407
Silver or coho	23,955	40,586	3,424	7,400	-	-	27,379	47,986
Total	290,964	467,496	7,737	26,441	-	-	298,701	493,937
Scup or porgy	2,252	3,081	5,088	6,395	-	-	7,340	9,476
Sea bass:								
Black	344	1,061	1,772	3,388	-	-	2,116	4,449
White	20	87	24	109	-	-	44	196
Sea trout:								
Gray	7,875	6,188	1,470	918	-	-	9,345	7,086
Spotted	1,551	3,025	1	3	-	-	1,552	3,028
White	174	192	107	94	-	-	281	286
Sharks:								
Dogfish	3,074	668	1,967	296	-	-	5,041	964
Other	303	483	2,375	3,805	11	30	2,689	4,318
Snapper:								
Red	34	187	2,002	9,633	-	-	2,036	9,820
Other	249	958	1,755	6,641	-	-	2,004	7,599
Striped bass	149	325	3	13	-	-	152	338
Swordfish	116	769	3,497	24,262	773	5,477	4,386	30,508
Tilefish	-	-	2,718	7,275	-	-	2,718	7,275

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1) - Continued

Species	Distance caught off U.S. shores: 0 to 3 miles (2)		Distance caught off U.S. shores: 3 to 200 miles		International waters (Includes catch off foreign coasts)		Total	
Fish - continued:	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Tuna:								
Albacore	3	4	4,138	4,896	1,109	1,341	5,250	6,241
Bigeye	10	88	580	4,820	38	184	628	5,092
Bluefin	(4)	1	3,518	5,424	1,330	1,366	4,838	6,791
Skipjack	98	237	956	2,201	106,659	75,456	107,713	77,894
Yellowfin	126	402	5,157	14,792	127,514	104,780	132,797	119,974
Unclassified	34	16	330	999	153	227	517	1,242
Total	271	748	14,679	33,132	236,803	183,354	251,753	217,234
Whiting	795	431	17,380	7,890	(4)	(4)	18,175	8,321
Other marine finfishes	41,490	32,955	70,036	28,928	731	2,458	112,257	64,346
Other freshwater fishes	57,722	41,247	-	-	-	-	57,722	41,247
Total fish	1,304,825	753,110	2,178,803	683,984	244,580	200,143	3,728,210	1,637,237
Shellfish et al.								
Clams:								
Hard	5,349	46,808	-	-	-	-	5,349	46,808
Ocean quahog	814	2,568	19,771	13,148	-	-	20,585	15,716
Soft	2,670	18,435	-	-	-	-	2,670	18,435
Surf	10,797	11,089	24,923	31,524	-	-	35,720	42,613
Other	1,624	11,338	-	-	-	-	1,624	11,338
Total	21,254	90,238	44,694	44,672	-	-	65,948	134,910
Crabs:								
Blue, hard	83,684	58,005	-	-	-	-	83,684	58,005
Dungeness	7,676	21,878	2,488	7,229	-	-	10,164	29,107
King	316	2,160	11,436	85,495	-	-	11,752	87,655
Snow (tanner)	4,649	18,122	45,246	65,286	-	-	49,895	83,408
Other	2,027	3,046	3,788	8,906	15	11	5,830	11,963
Total	98,352	103,211	62,958	166,916	15	11	161,325	270,138

See footnotes at end of table.

(Continued)

COMMERCIAL LANDINGS OF FISH AND SHELLFISH BY U.S. FISHING CRAFT: BY SPECIES, BY DISTANCE CAUGHT OFF U.S. SHORES AND IN INTERNATIONAL WATERS, 1986 (1) - Continued

Species	Distance caught off U.S. shores				International waters (Includes catch off foreign coasts)		Total	
	0 to 3 miles (2)		3 to 200 miles					
Shellfish et al. - continued:	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars	Metric tons	Thousand dollars
Lobsters:								
American	17,754	98,976	3,078	21,113	57	467	20,889	120,556
Spiny	739	5,106	2,334	14,141	-	-	3,073	19,247
Oysters	18,392	78,068	-	-	-	-	18,392	78,068
Scallops:								
Bay	334	6,527	-	-	-	-	334	6,527
Calico	-	-	733	3,087	-	-	733	3,087
Sea	571	5,955	8,497	91,460	-	-	9,068	97,415
Shrimp:								
New England	538	695	4,147	5,825	-	-	4,685	6,520
South Atlantic	8,641	46,639	1,846	12,874	-	-	10,487	59,513
Gulf	76,804	220,142	61,113	342,903	-	-	137,917	563,045
Pacific Coast	4,269	4,535	24,142	29,130	-	-	28,411	33,665
Other	24	1	-	-	-	-	24	1
Total	90,276	272,012	91,248	390,732	-	-	181,524	662,744
Squid:								
Atlantic	3,866	2,956	11,168	7,323	-	-	15,034	10,279
Pacific	17	7	19,153	4,361	-	-	19,170	4,365
Other shellfish	29,798	33,265	4,751	4,827	1,790	7,261	36,339	45,353
Total shellfish et al.	281,355	696,321	248,612	748,632	1,862	7,739	531,829	1,452,692
Grand total, 1986	1,586,180	1,449,431	2,427,415	1,432,616	246,442	207,882	4,260,039	3,089,929
Grand total, 1985 (3)	2,046,484	1,297,729	1,672,200	1,095,529	229,513	209,560	3,948,197	2,602,818

(1) Landings are reported in round (live) weight for all items, except univalve and bivalve mollusks, such as clams, oysters, and scallops, which are reported in weight of meats (excluding the shell). The National Marine Fisheries Service estimated the distance from shore for Texas landings data collected by the Texas Parks and Wildlife Department.
(2) Includes landings from the Great Lakes and other inland waters.
(3) For individual species breakout see "Fisheries of the United States, 1985" pages 8-11.
(4) Less than 1 metric ton or $500.

Note:--Data are preliminary. Data include landings by U.S.-flag vessels at Puerto Rico and other ports outside the 50 States and catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. FCZ (joint ventures). Therefore, they will not agree with "U.S. Commercial Landings" table on pages 1-3. Data do not include aquaculture products, except oysters and clams.

HISTORICAL LANDINGS, BY REGIONS, 1920-1986

YEAR	NEW ENGLAND		MIDDLE ATLANTIC		CHESAPEAKE		SOUTH ATLANTIC	
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS
1920	(1)	(1)	(1)	(1)	530,750	12,740	(1)	(1)
1921	(1)	(1)	332,932	11,667	(1)	(1)	(1)	(1)
1922	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1923	(1)	(1)	(1)	(1)	(1)	(1)	228,747	5,087
1924	406,822	18,818	(1)	(1)	(1)	(1)	(1)	(1)
1925	(1)	(1)	(1)	(1)	333,206	13,948	(1)	(1)
1926	(1)	(1)	168,013	12,456	(1)	(1)	(1)	(1)
1927	(1)	(1)	(1)	(1)	(1)	(1)	260,669	5,695
1928	603,598	25,620	(1)	(1)	(1)	(1)	258,440	6,027
1929	694,286	29,072	192,150	14,221	275,680	11,621	340,874	5,952
1930	701,351	27,493	194,850	13,132	316,393	11,472	275,807	4,269
1931	540,298	20,140	164,899	9,211	293,271	7,428	150,393	3,066
1932	480,521	14,001	141,221	4,654	359,007	5,905	154,303	2,383
1933	499,936	13,486	169,754	4,811	272,380	5,061	(1)	(1)
1934	(1)	(1)	(1)	(1)	289,011	5,943	261,080	3,624
1935	655,430	17,984	279,438	6,416	265,827	5,525	(1)	(1)
1936	(1)	(1)	(1)	(1)	314,095	6,488	369,984	5,107
1937	670,864	19,937	264,652	7,896	292,244	6,361	315,775	4,051
1938	631,520	18,275	216,858	8,249	294,594	6,663	414,308	4,317
1939	663,866	19,509	280,052	7,387	323,653	7,197	388,101	4,034
1940	626,054	20,494	355,553	7,651	320,736	7,456	325,515	4,065
1941	(1)	(1)	(1)	(1)	328,155	9,121	(1)	(1)
1942	705,085	36,294	319,193	12,468	202,240	10,061	(1)	(1)
1943	645,591	43,003	321,026	18,046	(1)	(1)	(1)	(1)
1944	713,692	41,910	422,980	21,330	267,391	19,823	(1)	(1)
1945	845,471	56,590	494,193	23,224	304,463	30,363	404,947	15,132
1946	(1)	(1)	(1)	(1)	359,946	27,199	(1)	(1)
1947	802,593	56,179	632,405	28,425	408,015	28,333	(1)	(1)
1948	998,380	67,988	500,992	28,642	364,336	27,604	(1)	(1)
1949	999,976	58,537	520,976	27,117	334,656	25,182	(1)	(1)
1950	1,006,590	60,576	491,685	28,843	380,892	25,007	260,881	18,944
1951	916,807	67,432	555,392	29,432	330,590	25,111	310,783	17,966
1952	954,563	67,296	593,190	28,908	283,626	26,528	436,307	19,617
1953	864,005	60,112	963,843	30,122	342,537	26,364	326,545	20,157
1954	966,441	57,602	886,879	30,552	472,563	31,838	326,064	17,560
1955	955,418	57,243	871,096	28,937	496,208	31,601	346,574	17,274
1956	1,015,246	59,273	1,054,438	30,823	376,358	32,772	443,945	19,920
1957	1,030,883	60,810	928,122	28,420	447,323	32,444	335,188	20,648
1958	997,749	65,480	625,383	23,126	503,237	36,699	375,655	20,078
1959	933,206	66,236	760,429	22,763	589,356	38,445	468,712	18,870
1960	851,964	61,474	783,848	21,757	435,797	34,861	378,879	20,230
1961	760,078	60,858	825,443	23,952	477,906	37,093	402,246	19,936
1962	871,681	65,775	944,374	25,209	521,475	33,627	305,416	23,462
1963	828,889	68,289	550,464	21,345	430,203	29,804	370,717	19,468
1964	681,857	67,596	370,223	20,897	536,596	35,948	335,997	20,619
1965	702,181	74,837	355,951	24,681	591,534	40,189	356,652	26,789
1966	684,375	78,247	167,912	21,576	501,689	35,238	367,777	27,069
1967	625,340	70,256	162,062	23,558	422,317	35,449	353,344	25,026
1968	634,748	75,657	186,530	25,163	437,858	36,559	339,438	32,943
1969	568,266	80,578	137,864	25,538	354,082	36,110	318,709	36,357
1970	531,272	91,033	139,991	29,915	630,450	40,543	280,167	29,840
1971	513,521	94,645	161,564	32,420	566,878	41,487	258,053	41,693
1972	489,252	106,637	240,073	38,912	736,159	46,090	286,323	44,872
1973	518,147	117,185	256,761	42,533	701,161	62,352	240,164	57,287
1974	522,492	124,333	210,970	43,564	597,268	58,046	304,663	50,787
1975	498,363	154,132	188,059	49,792	509,144	55,974	333,073	63,576
1976	547,481	174,139	268,785	68,829	586,990	74,163	318,481	73,956
1977	585,965	207,221	214,110	70,002	671,109	87,025	346,864	71,242
1978 (3)	660,717	256,510	200,603	78,591	598,618	94,179	398,940	96,276
1979 (3)	708,606	302,037	228,452	92,433	638,990	121,577	488,422	145,154
1980 (3)	788,089	327,299	244,034	96,594	717,086	129,651	473,457	148,377
1981 (3)	696,997	355,850	227,627	95,275	603,034	125,764	543,006	138,498
1982 (3)	687,344	373,918	129,464	92,558	791,155	120,206	426,565	164,093
1983 (3)	711,075	435,127	128,023	93,967	841,428	130,240	397,324	172,587
1984 (3)	694,302	433,523	153,142	109,286	663,462	138,130	401,810	149,858
1985 (3)	589,792	419,416	151,162	100,695	814,589	123,953	310,720	156,330
1986 (3)	563,495	449,059	155,942	113,616	617,070	130,860	248,634	154,681

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HISTORICAL LANDINGS, BY REGIONS, 1920-1986 - Continued

YEAR	GULF		PACIFIC		GREAT LAKES	
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS
1920	(1)	(1)	(1)	(1)	(2)	(2)
1921	(1)	(1)	(1)	(1)	(2)	(2)
1922	(1)	(1)	(1)	(1)	(2)	(2)
1923	160,324	8,097	(2)	(2)	(2)	(2)
1924	(1)	(1)	(2)	(2)	(2)	(2)
1925	(1)	(1)	(2)	(2)	(2)	(2)
1926	(1)	(1)	(2)	(2)	(2)	(2)
1927	195,705	9,964	979,833	32,727	(2)	(2)
1928	191,007	9,866	1,383,655	37,856	63,368	5,961
1929	194,521	8,951	1,676,932	41,621	85,389	6,788
1930	141,953	6,793	1,444,674	35,349	94,948	6,050
1931	138,917	5,015	1,195,431	23,556	91,727	6,029
1932	145,613	4,045	1,159,684	16,456	83,774	4,389
1933	(1)	(1)	1,487,556	23,077	(2)	(2)
1934	186,834	6,369	2,356,017	31,657	96,411	5,124
1935	(1)	(1)	2,314,572	31,792	(2)	(2)
1936	187,009	8,035	2,848,871	38,773	94,275	6,389
1937	230,977	10,175	2,402,661	43,014	83,958	6,033
1938	207,551	8,757	2,319,833	38,126	81,524	6,083
1939	239,816	9,870	2,165,992	36,673	85,235	6,762
1940	250,018	10,582	2,019,969	40,190	79,296	5,623
1941	(1)	(1)	2,549,625	55,401	78,065	6,470
1942	(1)	(1)	1,896,867	67,178	75,246	8,629
1943	(1)	(1)	2,047,908	77,829	78,221	12,268
1944	(1)	(1)	2,236,993	81,515	75,688	10,948
1945	341,080	39,197	2,024,330	84,982	78,643	13,800
1946	(1)	(1)	1,813,328	100,643	78,334	11,678
1947	(1)	(1)	1,656,833	121,748	69,801	10,737
1948	(1)	(1)	1,702,048	145,513	83,959	12,690
1949	524,588	49,706	1,837,408	139,672	85,693	11,458
1950	570,641	50,358	1,997,542	139,198	70,882	10,846
1951	649,668	63,623	1,474,863	136,494	70,146	10,664
1952	759,507	68,221	1,206,063	127,958	81,813	11,477
1953	759,422	85,158	1,030,984	110,654	77,252	9,578
1954	754,701	72,573	1,163,529	127,640	81,190	9,980
1955	829,638	76,287	1,115,427	106,532	76,754	9,699
1956	899,774	85,378	1,290,501	122,549	80,645	10,164
1957	691,933	84,364	1,192,300	107,706	75,529	9,576
1958	808,837	86,539	1,278,424	122,710	71,690	8,651
1959	1,154,951	77,640	1,055,250	104,186	65,817	7,104
1960	1,265,950	85,459	1,060,825	112,118	68,243	7,133
1961	1,377,112	75,521	1,182,829	127,990	70,641	6,971
1962	1,437,410	94,504	1,125,747	138,983	65,572	5,533
1963	1,399,512	98,790	1,116,999	124,105	59,006	5,289
1964	1,317,834	99,298	1,151,612	129,337	56,687	5,572
1965	1,463,475	113,542	1,146,725	148,363	55,905	5,832
1966	1,196,168	122,581	1,253,637	168,126	69,450	5,875
1967	1,180,781	127,406	1,134,735	140,377	83,565	6,050
1968	1,288,908	138,968	1,117,449	170,394	68,983	5,863
1969	1,614,506	152,320	1,195,934	177,416	68,536	6,060
1970	1,698,104	166,581	1,479,773	234,988	71,561	6,432
1971	2,096,641	199,416	1,269,109	219,184	63,920	6,628
1972	1,587,908	224,462	1,321,755	263,575	59,943	7,318
1973	1,543,736	266,634	1,433,091	363,380	68,262	8,896
1974	1,775,799	242,226	1,390,727	381,101	78,185	10,725
1975	1,654,036	270,581	1,551,372	352,046	61,689	9,255
1976	1,742,620	386,432	1,771,433	537,843	66,518	10,749
1977	1,482,432	408,380	1,809,474	672,721	73,037	10,272
1978 (3)	2,286,998	473,227	1,740,855	820,632	68,197	10,429
1979 (3)	2,128,903	530,145	1,924,718	1,005,687	48,975	10,814
1980 (3)	1,979,115	463,205	2,140,278	1,025,255	44,032	14,021
1981 (3)	1,699,821	553,730	2,069,635	1,063,449	38,820	11,739
1982 (3)	2,300,414	613,942	1,872,148	964,321	36,449	12,846
1983 (3)	2,442,991	615,574	1,739,453	845,820	46,899	13,783
1984 (3)	2,643,571	655,771	1,700,907	795,229	60,986	13,847
1985 (3)	2,412,485	596,806	1,816,315	862,627	54,027	14,909
1986 (3)	2,367,870	781,235	1,922,989	1,065,372	48,169	13,757

SEE FOOTNOTES AT END OF TABLE.

(CONTINUED ON NEXT PAGE)

HISTORICAL LANDINGS, BY REGIONS, 1920-1986 - Continued

YEAR	MISSISSIPPI RIVER		HAWAII		TOTAL	
	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS	THOUSAND POUNDS	THOUSAND DOLLARS
1920	(1)	(1)	(1)	(1)	530,750	12,740
1921	(1)	(1)	(1)	(1)	332,932	11,667
1922	105,734	4,504	(1)	(1)	105,734	4,504
1923	(1)	(1)	(1)	(1)	389,071	13,184
1924	(1)	(1)	(1)	(1)	406,822	18,818
1925	(1)	(1)	(1)	(1)	333,206	13,948
1926	(1)	(1)	(1)	(1)	168,013	12,456
1927	(1)	(1)	(1)	(1)	1,436,207	48,386
1928	(1)	(1)	(1)	(1)	2,500,068	85,330
1929	(1)	(1)	(1)	(1)	3,459,832	118,226
1930	(1)	(1)	(1)	(1)	3,169,976	104,558
1931	(1)	(1)	(1)	(1)	2,574,936	74,445
1932	(1)	(1)	(1)	(1)	2,524,123	51,833
1933	(1)	(1)	(1)	(1)	2,429,626	46,435
1934	(1)	(1)	(1)	(1)	3,189,353	52,717
1935	(1)	(1)	(1)	(1)	3,515,267	61,717
1936	(1)	(1)	(1)	(1)	3,814,234	64,792
1937	(1)	(1)	(1)	(1)	4,261,131	97,467
1938	(1)	(1)	(1)	(1)	4,166,188	90,470
1939	(1)	(1)	(1)	(1)	4,146,715	91,432
1940	(1)	(1)	(1)	(1)	3,977,141	96,061
1941	(1)	(1)	(1)	(1)	2,955,845	70,992
1942	(1)	(1)	(1)	(1)	3,198,631	134,630
1943	(1)	(1)	(1)	(1)	3,092,746	151,146
1944	(1)	(1)	(1)	(1)	3,716,744	175,526
1945	(1)	(1)	(1)	(1)	4,493,127	263,288
1946	(1)	(1)	(2)	(2)	2,251,608	139,520
1947	(1)	(1)	(2)	(2)	3,569,647	245,422
1948	(1)	(1)	14,647	4,112	3,664,362	286,549
1949	(1)	(1)	15,043	3,718	4,318,340	315,390
1950	105,796	10,104	15,917	3,508	4,900,826	347,384
1951	(1)	(1)	19,348	3,999	4,327,597	354,721
1952	(1)	(1)	13,961	3,475	4,329,031	353,450
1953	103,372	10,130	18,862	3,798	4,486,822	356,100
1954	90,476	7,894	20,610	3,709	4,762,453	359,348
1955	103,166	8,205	15,096	3,113	4,809,377	338,891
1956	90,779	8,139	16,560	3,175	5,268,246	372,193
1957	77,180	7,148	10,728	2,604	4,789,186	353,720
1958	74,870	7,396	11,361	2,632	4,747,206	373,311
1959	77,662	7,628	16,570	3,179	5,121,953	346,051
1960	85,605	7,829	11,118	2,704	4,942,229	353,565
1961	(2)	(2)	14,472	2,897	5,110,727	355,218
1962	69,353	6,515	13,157	2,820	5,354,185	396,428
1963	79,850	7,393	11,735	2,679	4,847,375	377,162
1964	77,131	7,383	12,685	2,848	4,540,622	389,498
1965	84,755	7,844	19,588	3,602	4,776,766	445,679
1966	111,872	10,514	13,014	3,128	4,365,894	472,354
1967	80,571	8,380	11,842	3,077	4,054,557	439,579
1968	72,892	8,259	12,896	3,451	4,159,702	497,257
1969	69,363	8,656	9,543	3,483	4,336,803	526,518
1970	74,851	9,914	11,051	3,900	4,917,220	613,146
1971	71,440	10,202	16,873	5,238	5,017,999	650,913
1972	69,826	10,364	14,443	5,743	4,805,682	747,973
1973	83,032	12,862	14,035	6,115	4,858,389	937,244
1974	75,435	15,654	10,990	6,028	4,966,529	932,464
1975	72,498	14,954	9,209	6,313	4,877,443	976,623
1976	70,658	14,381	14,761	8,879	5,387,727	1,349,371
1977	74,280	16,513	13,288	10,180	5,270,559	1,553,556
1978 (3)	58,197	13,036	14,575	11,620	6,027,700	1,854,500
1979 (3)	86,422	15,173	13,664	10,659	6,267,152	2,233,679
1980 (3)	84,828	20,930	11,435	11,870	6,482,354	2,237,202
1981 (3)	84,733	25,096	13,396	18,338	5,977,069	2,387,739
1982 (3)	109,526	33,683	14,245	14,426	6,367,310	2,389,993
1983 (3)	102,702	30,452	28,829	17,896	6,438,72[illegible]	2,355,446
1984 (3)	84,779	25,416	34,824	29,402	6,437,783	2,350,462
1985 (3)	91,565	29,479	16,987	22,022	6,257,642	2,326,237
1986 (3)	95,875	34,161	10,590	20,082	6,030,634	2,762,823

(1) NO SURVEY TAKEN. (2) PARTIAL SURVEY TAKEN. (3) PRELIMINARY DATA.

JOINT VENTURE CATCHES BY U.S.-FLAG VESSELS, BY SPECIES, 1982-86

Species	1982			1983			1984		
	Metric tons	Thousand pounds	Thousand dollars	Metric tons	Thousand pounds	Thousand dollars	Metric tons	Thousand pounds	Thousand dollars
Alewives	-	-	-	-	-	-	9	20	1
Atka mackerel	12,475	27,503	1,926	11,302	24,916	1,514	36,493	80,453	5,632
Cod	13,786	30,392	3,044	16,749	36,924	3,474	38,512	84,904	8,546
Flounders	26,649	58,750	3,997	36,958	81,477	5,287	54,372	119,869	7,605
Hake, Pacific (whiting)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Ocean perch	3	7	1	2,114	4,661	616	2,313	5,099	689
Mackerel, Atlantic	(1)	(1)	(1)	(1)	(1)	(1)	1,423	3,138	220
Pollock, Alaska	128,886	284,142	15,954	283,104	624,131	26,083	444,256	979,406	41,591
Rockfishes	30	66	7	311	686	94	346	763	105
Sablefish	124	274	4	363	800	141	871	1,920	396
Whiting	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Squid:									
Illex	(1)	(1)	(1)	8,344	18,395	1,840	6,010	13,249	2,000
Loligo	(1)	(1)	(1)	2,332	5,142	1,646	760	1,676	395
Other fish (2)	72,691	160,255	11,468	73,371	161,755	10,555	79,192	174,587	11,862
Total	254,644	561,389	36,401	434,948	958,887	51,250	664,557	1,465,084	79,042

Species	1985			1986		
	Metric tons	Thousand pounds	Thousand dollars	Metric tons	Thousand pounds	Thousand dollars
Alewives	-	-	-	(1)	(1)	(1)
Atka mackerel	39,938	88,047	6,109	31,991	70,527	4,828
Cod	36,373	80,189	7,799	66,015	145,537	14,449
Flounders	179,663	396,084	24,833	215,878	475,924	28,847
Hake, Pacific (whiting)	(1)	(1)	(1)	81,639	179,981	8,736
Ocean perch	281	619	56	273	602	72
Mackerel, Atlantic	3,788	8,350	584	(1)	(1)	(1)
Pollock, Alaska	614,337	1,354,368	59,730	904,111	1,993,203	95,294
Rockfishes	70	154	14	215	474	57
Sablefish	94	207	30	434	956	137
Whiting	-	-	-	65	144	9
Squid:						
Illex	2,540	5,601	595	(1)	(1)	(1)
Loligo	1,082	2,386	599	(1)	(1)	(1)
Other fish (2)	33,060	72,884	3,971	9,766	21,531	2,470
Total	911,226	2,008,889	104,320	1,310,387	2,888,879	154,899

(1) Confidential Data.
(2) Includes alewives, Atlantic mackerel, butterfish, Pacific and red hakes, sea herring, whiting, squid, and other miscellaneous fish unless shown separately.

Note:--Joint ventures are catches by U.S.-flag vessels unloaded onto foreign vessels within the U.S. EEZ. They are not included in the U.S. commercial landings table on pages 1-3, but are included with the distance from shore table on pages 8-11. The 1981 total catch was 139,625 metric tons (307,819 thousand pounds) valued at $21,005 thousand. Because the data by species for earlier years are confidential, we are unable to publish these data. The totals are--1979, 10,559 metric tons (23,279 thousand lb) valued at $1,319 thousand and in 1980, 62,460 metric tons (137,700 thousand lb) valued at $8,373 thousand.

DATA COLLECTION. While data on commercial fisheries have been collected for many years, detailed statistical information on marine recreational fishing is also required to support a variety of fishery management and development purposes. These include the objectives of the Magnuson Fishery Conservation and Management Act. However, the lack of a continuous or systematic collection of marine recreational fishery data had prevented the accomplishment of these goals. Therefore, NMFS began a new comprehensive Marine Recreational Fishery Statistics Survey (MRFSS) in 1979. Surveys have been conducted in the following areas and years:

Atlantic and Gulf, 1979 through 1986
Pacific, mid-1979 through 1986
Western Pacific, 1979 through 1981
Caribbean, 1979, 1981

Preliminary estimates of catch and trips from the MRFSS for the Atlantic, Gulf, and Pacific coasts for 1986 are presented in the tables below. Summary graphs for 1979-1986 catch and trips are also shown. The survey is being conducted in 1987 along the Atlantic, Gulf, and Pacific coasts.

These surveys use an intercept survey of fishermen in the field and an independent telephone survey of households. Each component survey provides certain information that is combined to produce estimates of recreational catch, fishing effort and participation. Estimates are generated by subregion or State, species, mode and area of fishing. In addition, information on catch rates and fish lengths and weights is obtained.

The MRFSS is only one of several NMFS efforts to obtain data on recreational fisheries. Specialized surveys on particular fisheries or to obtain socio-economic data are also conducted by NMFS. The Southeast partyboat fishing survey is one example, and 1985 results from that survey are presented on page 27.

DATA TABLES. The MRFSS catch data show the total number of fish caught for twenty of the most frequently caught species groups in each survey area. Total number caught includes those fish brought ashore in whole form which were available for identification, weighing, and measuring as well as those not available for identification. This latter category includes those fish used for bait, discarded, filleted or released alive. Each fisheries group may contain one or more species, genera, or families.

Several tables show the distribution of total catch by subregion, fishing area and mode. The fishing areas are: ocean 3 miles or less from land, ocean more than 3 miles from land, inland (sounds, rivers, bays), and unknown. However, ocean data outside 3 miles for the Gulf coast of Florida are further divided into 3 to 10 miles and more than 10 miles from land.

The fishing modes are: shore (man-made structures and beach/bank from previous surveys), party/charter boat, and private/rental boat. However, partyboats were not sampled in the South Atlantic and Gulf subregions, so party/charter estimates include only charterboats in these areas.

The fishing trip table indicates the estimated number of trips by coastal residents (generally residing within 25 miles of the coast), non-coastal residents of the subregion bordering saltwater, and non-residents.

The 1986 survey did not include Texas or the January/February wave for Atlantic coast States north of Georgia. The data presented below will be finalized in separate marine recreational fishery reports to be published this summer.

PRELIMINARY 1986 MRFSS DATA. The U.S. marine recreational finfish catch in 1986 (excluding Alaska, Hawaii, and Pacific coast salmon) was an estimated 466.1 million fish. These fish weighed approximately 699.2 million pounds and were taken on an estimated 72.4 million fishing trips. The estimated number of U.S. marine recreational fishermen has been relatively stable over the last few years at 17 million. Excluding catches of freshwater and industrial species (such as anchovies and menhaden), the marine recreational catch comprised approximately 30 percent of the total U.S. finfish landings used for food in 1986.

The Atlantic and Gulf coasts accounted for approximately 88 percent of the total U.S. marine recreational finfish catch by number. Eighty-five percent of the estimated U.S. trips were made on the Atlantic and Gulf coasts.

Approximately 14 percent of the total U.S. catch by number was made in the Exclusive Economic Zone (EEZ), the principal area of NMFS management authority. However, for some species (e.g., red snapper, bocaccio) over 70 percent of the catch was made in the EEZ.

The private/rental boat mode accounted for 60 percent of the total U.S. marine recreational finfish catch in number. Shore mode catches were 25 percent of the total and party/charter catches (excluding South Atlantic and Gulf partyboats) were 15 percent of the total.

Atlantic and Gulf. In terms of number of fish, black sea bass was the most frequently caught species on the Atlantic and Gulf coasts in 1986. This was different from previous years when bluefish was the top-ranked species in 5 of the last 7 years. Other frequently caught species in 1986 were Atlantic croaker, bluefish, and scup. Top-ranked species in each subregion in 1986 were scup in the North Atlantic, black sea bass in the Mid-Atlantic, Atlantic croaker and spot in the South Atlantic, and spotted seatrout in the Gulf of Mexico. The Mid-Atlantic (40 percent) and Gulf (32 percent) subregions accounted for the highest numbers of Atlantic and Gulf coasts fishes. These data are consistent with the results obtained in the 1983 to 1985 surveys (See Fisheries of the U.S., 1985).

The inland and ocean 3 miles or less from shore areas accounted for approximately 81 percent of the Atlantic and Gulf coasts catch in number. Sixteen percent of the remaining catch was from the ocean more than 3 miles from shore.

Sixty-two percent of the Atlantic and Gulf coast catches was taken in the private/rental boat mode in 1986. However, other modes were important for particular species such as black sea bass from the party/charter boat mode and kingfishes from the shore mode.

Coastal residents accounted for 71 percent of the Atlantic and Gulf trips made in 1986. Non-residents accounted for an additional 25 percent of the trips. Total trips in the Mid-Atlantic exceeded all other subregions. This distribution of trips was similar to previous years.

Pacific. The catch of Pacific mackerel was the highest of any species on the Pacific coast in 1986. Top-ranked species groups in each subregion were Pacific mackerel in Southern California, rockfishes and surf smelt in Northern California, black rockfish in Oregon, and surf smelt in Washington. Southern California accounted for 64 percent of the Pacific coast catch. Data on salmon were not included in the NMFS survey as a result of a cooperative arrangement with the Pacific coast States. These States had ongoing salmon data collection efforts which estimated a Pacific coast total salmon catch of 950,000 fish in 1985.

The ocean 3 miles or less from shore area had the highest catch in number (56 percent) on the Pacific coast in 1986. The Pacific coast portion of the catch in the ocean more than 3 miles from shore (18 percent) was similar to the 16 percent for the Atlantic and Gulf coasts.

The overall catch among fishing modes was more evenly distributed on the Pacific coast than on the Atlantic and Gulf coasts. Percentage catches in number of fish were 43 percent for private/rental boats, 30 percent for party/charter boats, and 27 percent for the shore mode.

The percentage of trips by coastal residents (89 percent) was higher on the Pacific coast than the Atlantic and Gulf coasts (71 percent). Fifty-five percent of the Pacific coast trips in 1986 were in the Southern California subregion. Considering that an additional 25 percent of the trips were made in the Northern California subregion, 80 percent of the non-salmon Pacific coast trips in 1986 were made in California.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION, JANUARY 1986 - DECEMBER 1986

SPECIES GROUP	NORTH ATLANTIC	MID ATLANTIC	SOUTH ATLANTIC	GULF OF MEXICO	TOTAL
	THOUSANDS				
HERRINGS	701	1,085	5,048	4,147	10,981
SALTWATER CATFISHES	*	-	3,025	15,325	18,353
BLACK SEA BASS	981	30,257	1,670	1,801	34,710
BLUEFISH	10,646	18,379	3,088	541	32,655
RED SNAPPER	*	*	207	644	850
SCUP	21,567	10,730	*	*	32,297
PINFISH	*	-	2,536	7,313	9,860
SHEEPSHEAD	*	31	835	1,845	2,710
SPOTTED SEATROUT	*	179	1,952	21,425	23,556
WEAKFISH	-	11,105	1,202	*	12,319
SAND SEATROUT	*	*	*	6,400	6,400
SPOT	*	15,738	5,760	142	21,640
KINGFISHES	*	656	3,251	4,093	8,000
ATLANTIC CROAKER	*	12,988	6,088	14,909	33,985
RED DRUM	*	57	552	3,510	4,119
MULLETS	*	46	1,705	4,491	6,242
KING MACKEREL	*	-	591	147	752
SUMMER FLOUNDER	4,305	18,362	1,484	*	24,150
WINTER FLOUNDER	5,411	5,016	*	*	10,428
OTHER FISHES	13,031	39,012	19,842	44,915	116,799
TOTAL	56,654	163,670	58,835	131,646	410,805

NOTE: A DASH (-) DENOTES LESS THAN THIRTY THOUSAND.
HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS.
AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: TABLE EXCLUDES ESTIMATES FOR TEXAS, AND PARTY BOAT CATCH ESTIMATES FOR THE SOUTH ATLANTIC AND GULF.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND SUBREGION, JANUARY 1986 - DECEMBER 1986

SPECIES GROUP	SOUTHERN CALIFORNIA	NORTHERN CALIFORNIA	OREGON	WASHINGTON	TOTAL
	THOUSANDS				
PACIFIC HERRING	-	277	30	171	482
SURF SMELT	*	1,556	120	3,669	5,345
SMELTS, OTHER	*	-	-	567	578
WALLEYE POLLOCK	*	*	*	158	158
JACKSMELT	207	146	-	*	356
KELP BASS	4,500	-	*	*	4,502
BARRED SANDBASS	2,270	*	*	*	2,270
WHITE CROAKER	2,117	738	*	*	2,855
QUEENFISH	551	*	*	*	551
WALLEYE SURFPERCH	171	55	32	-	261
REDTAIL SURFPERCH	*	61	110	53	224
BARRED SURFPERCH	538	178	*	*	716
PACIFIC BONITO	3,970	-	*	*	3,970
PACIFIC MACKEREL	7,086	79	*	*	7,165
BLACK ROCKFISH	36	465	319	81	902
BLUE ROCKFISH	559	327	50	-	945
BOCACCIO	677	191	-	-	868
OLIVE ROCKFISH	197	66	*	*	263
ROCKFISHES, OTHER	4,336	2,374	76	331	7,117
OTHER FISHES	8,115	4,706	1,007	1,958	15,786
TOTAL	35,334	11,227	1,754	6,998	55,312

NOTE: A DASH (-) DENOTES LESS THAN THIRTY THOUSAND.
HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS.
AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: DATA DO NOT INCLUDE THE CATCH OF SALMON ESTIMATED BY STATE RECREATIONAL SURVEYS.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND AREA OF FISHING, ATLANTIC AND GULF COASTS COMBINED, JANUARY 1986 - DECEMBER 1986

SPECIES GROUP	OCEAN 3 MI OR LESS	OCEAN MORE THAN 3 MI	OCEAN 3-10 MI	OCEAN OVER 10 MI	INLAND	UNDEFINED (1)	ALL AREAS
	THOUSANDS						
HERRINGS	9,278	129	*	43	1,531	*	10,981
SALTWATER CATFISHES	9,239	832	273	92	7,918	*	18,353
BLACK SEA BASS	12,444	11,968	254	807	7,935	1,300	34,710
BLUEFISH	10,541	7,826	45	34	13,678	530	32,655
RED SNAPPER	74	619	54	101	-	*	850
SCUP	10,542	3,978	*	*	17,755	-	32,297
PINFISH	5,327	83	265	394	3,787	-	9,860
SHEEPSHEAD	797	30	31	-	1,842	*	2,710
SPOTTED SEATROUT	10,459	1,492	1,063	132	10,359	51	23,556
WEAKFISH	3,576	2,121	*	*	3,741	2,880	12,319
SAND SEATROUT	3,592	214	277	-	2,312	*	6,400
SPOT	5,491	205	-	*	12,498	3,416	21,640
KINGFISHES	6,280	139	115	38	1,277	151	8,000
ATLANTIC CROAKER	8,795	633	87	-	21,269	3,189	33,985
RED DRUM	1,836	113	32	-	2,123	-	4,119
MULLETS	4,174	-	183	*	1,824	38	6,242
KING MACKEREL	187	478	58	-	-	*	752
SUMMER FLOUNDER	9,714	881	*	*	13,258	297	24,150
WINTER FLOUNDER	1,318	205	*	*	8,905	*	10,428
OTHER FISHES	52,485	18,147	4,029	5,098	35,834	1,207	116,799
TOTAL	166,148	50,117	6,795	6,792	167,865	13,090	410,805

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND AREA OF FISHING, PACIFIC COAST, JANUARY 1986 - DECEMBER 1986

SPECIES GROUP	OCEAN 3 MILES OR LESS	OCEAN MORE THAN 3 MILES	INLAND	UNDEFINED (1)	TOTAL
	THOUSANDS				
PACIFIC HERRING	-	*	476	*	482
SURF SMELT	2,464	*	2,882	*	5,345
SMELTS, OTHER	-	*	572	*	578
WALLEYE POLLOCK	-	*	158	*	158
JACKSMELT	198	-	154	-	356
KELP BASS	3,300	1,119	73	-	4,502
BARRED SANDBASS	1,183	631	427	-	2,270
WHITE CROAKER	2,480	225	121	-	2,855
QUEENFISH	470	-	80	*	551
WALLEYE SURFPERCH	190	-	69	-	261
REDTAIL SURFPERCH	139	*	82	-	224
BARRED SURFPERCH	702	*	-	-	716
PACIFIC BONITO	2,839	987	138	-	3,970
PACIFIC MACKEREL	4,715	2,188	163	98	7,165
BLACK ROCKFISH	770	-	103	*	902
BLUE ROCKFISH	783	139	-	-	945
BOCACCIO	228	608	-	32	868
OLIVE ROCKFISH	169	92	*	-	263
ROCKFISHES, OTHER	3,909	2,690	361	157	7,117
OTHER FISHES	6,419	1,443	7,776	148	15,786
TOTAL	30,967	10,156	13,656	533	55,312

(1) THIS CATEGORY INCLUDES "MISSING DATA" ON AREA, AND LOCAL VARIATION IN MARINE GEOGRAPHIC TERMINOLOGY WHICH SOMETIMES PREVENTED INTERVIEWERS FROM DETERMINING ACCEPTABLE RESPONSES TO QUESTIONS ON "DISTANCE FROM SHORE".

NOTE: "OCEAN 3-10 MI" AND "OCEAN OVER 10 MI" REFER ONLY TO TEXAS AND FLORIDA GULF COASTS WHERE STATE JURISDICTION EXTENDS TO THREE MARINE LEAGUES, APPROXIMATELY TEN NAUTICAL MILES. THE TOTAL OCEAN ESTIMATE IS ADDITIVE ACROSS THE FOUR AREAS. TEXAS DATA ARE EXCLUDED.

NOTE: PACIFIC COAST DATA DO NOT INCLUDE SALMON CATCHES ESTIMATED BY STATE RECREATIONAL SURVEYS.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND MODE OF FISHING ATLANTIC AND GULF COASTS, JANUARY 1986 - DECEMBER 1986

SPECIES GROUP	SHORE	PARTY/ CHARTER BOAT	PRIVATE/ RENTAL BOAT	ALL MODES
	THOUSANDS			
HERRINGS	6,909	107	3,966	10,981
SALTWATER CATFISHES	3,700	106	14,548	18,353
BLACK SEA BASS	2,621	20,067	12,022	34,710
BLUEFISH	10,460	6,641	15,553	32,655
RED SNAPPER	-	497	352	850
SCUP	2,171	3,386	26,740	32,297
PINFISH	6,167	130	3,563	9,860
SHEEPSHEAD	999	-	1,705	2,710
SPOTTED SEATROUT	1,913	415	21,228	23,556
WEAKFISH	984	1,937	9,397	12,319
SAND SEATROUT	562	199	5,639	6,400
SPOT	7,228	2,730	11,681	21,640
KINGFISHES	6,136	-	1,840	8,000
ATLANTIC CROAKER	8,462	716	24,807	33,985
RED DRUM	567	51	3,501	4,119
MULLETS	3,927	-	2,310	6,242
KING MACKEREL	56	107	588	752
SUMMER FLOUNDER	2,446	3,003	18,701	24,150
WINTER FLOUNDER	1,042	935	8,450	10,428
OTHER FISHES	33,713	13,777	69,309	116,799
TOTAL	100,062	54,840	255,902	410,805

NOTE: A DASH (-) DENOTES LESS THAN THIRTY THOUSAND.
HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS.
AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: PARTY BOAT ESTIMATES FOR THE SOUTH ATLANTIC AND GULF SUBREGIONS ARE EXCLUDED FROM THE PARTY/CHARTER BOAT COLUMN.

ESTIMATED TOTAL NUMBER OF FISH CAUGHT BY MARINE RECREATIONAL FISHERMEN BY SPECIES GROUP AND FISHING MODE, PACIFIC COAST, JANUARY 1986 - DECEMBER 1986

SPECIES GROUP	SHORE	PARTY/ CHARTER BOAT	PRIVATE/ RENTAL BOAT	ALL MODES
	THOUSANDS			
PACIFIC HERRING	418	-	64	482
SURF SMELT	5,344	*	-	5,345
SMELTS, OTHER	578	*	-	578
WALLEYE POLLOCK	-	30	122	158
JACKSMELT	282	-	70	356
KELP BASS	111	2,795	1,596	4,502
BARRED SAND BASS	53	1,209	1,008	2,270
WHITE CROAKER	524	322	2,009	2,855
QUEENFISH	511	-	37	551
WALLEYE SURFPERCH	244	-	-	261
REDTAIL SURFPERCH	209	*	-	224
BARRED SURFPERCH	708	*	-	716
PACIFIC BONITO	166	1,215	2,590	3,970
PACIFIC MACKEREL	425	3,471	3,268	7,165
BLACK ROCKFISH	98	180	624	902
BLUE ROCKFISH	-	226	698	945
BOCCACIO	48	765	56	868
OLIVE ROCKFISH	-	158	102	263
ROCKFISHES, OTHER	192	3,627	3,298	7,117
OTHER FISHES	5,043	2,402	8,341	15,786
TOTAL	14,983	16,407	23,922	55,312

NOTE: A DASH (-) DENOTES LESS THAN THIRTY THOUSAND.
HOWEVER, THE NUMBER IS INCLUDED IN ROW AND COLUMN TOTALS.
AN ASTERISK (*) DENOTES NONE REPORTED.

NOTE: DATA DO NOT INCLUDE SALMON CATCHES ESTIMATED BY STATE RECREATIONAL SURVEYS.

ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN, BY SUBREGION AND AREA OF RESIDENCE ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1986 - DECEMBER 1986

SUBREGION	TRIPS BY COASTAL RESIDENTS	TRIPS BY NON-COASTAL RESIDENTS	NON-RESIDENT TRIPS	ALL TRIPS
	THOUSANDS			
NORTH ATLANTIC.....	5,421	412	2,500	8,333
MID-ATLANTIC.....	14,832	481	5,248	20,561
SOUTH ATLANTIC.....	10,614	716	3,364	14,694
GULF OF MEXICO (1)....	13,032	247	4,538	17,818
TOTAL (2).....	43,899	1,856	15,650	61,406
SOUTHERN CALIFORNIA...	5,500	104	515	6,119
NORTHERN CALIFORNIA...	2,392	263	103	2,757
OREGON.....	858	26	76	960
WASHINGTON.....	1,050	76	67	1,193
TOTAL (3).....	9,800	469	761	11,029
GRAND TOTAL.....	53,699	2,325	16,411	72,435

(1) EXCLUDES TEXAS DATA.
(2) EXCLUDES JANUARY/FEBRUARY TRIPS FROM MAINE TO SOUTH CAROLINA.
(3) EXCLUDES PACIFIC COAST SALMON FISHING TRIPS.

ESTIMATED NUMBER OF FISHING TRIPS BY MARINE RECREATIONAL FISHERMEN, BY SUBREGION AND MODE OF FISHING ATLANTIC, GULF AND PACIFIC COASTS, JANUARY 1986 - DECEMBER 1986

SUBREGION	SHORE	PARTY/ CHARTER BOAT	PRIVATE/ RENTAL BOAT	ALL MODES
	THOUSANDS			
NORTH ATLANTIC.....	2,858	1,078	4,397	8,333
MID-ATLANTIC.....	6,662	2,805	11,094	20,561
SOUTH ATLANTIC.....	7,672	1,162	5,860	14,694
GULF OF MEXICO (1)....	9,477	420	7,921	17,818
TOTAL (2).....	26,669	5,465	29,272	61,406
SOUTHERN CALIFORNIA...	2,263	1,340	2,516	6,119
NORTHERN CALIFORNIA...	1,276	197	1,285	2,757
OREGON.....	451	47	462	960
WASHINGTON.....	436	26	731	1,193
TOTAL (3).....	4,426	1,610	4,993	11,029
GRAND TOTAL.....	31,095	7,075	34,265	72,435

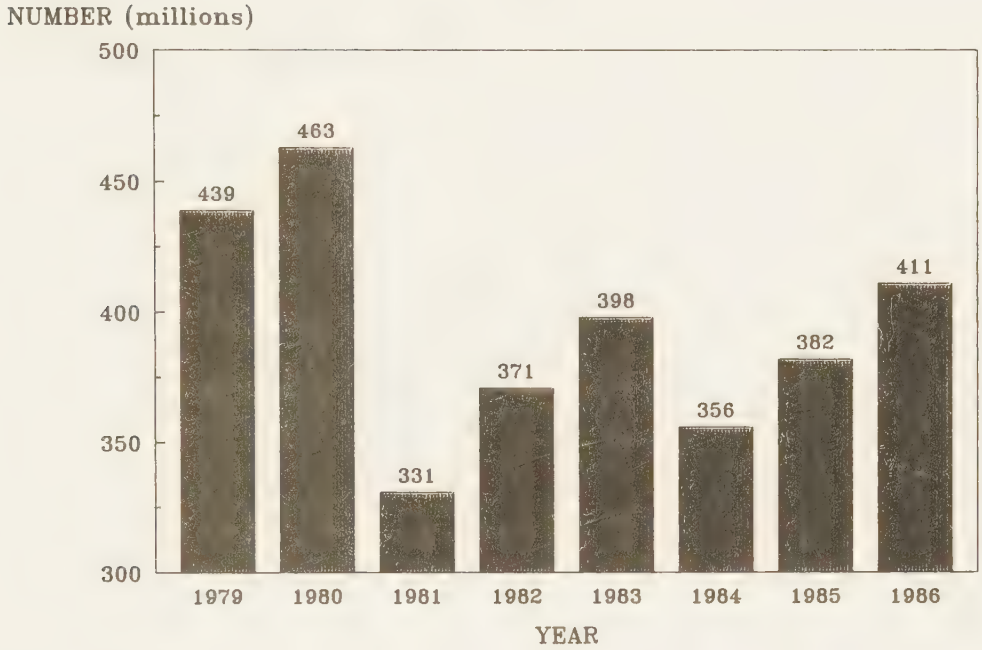
(1) EXCLUDES TEXAS DATA.
(2) EXCLUDES JANUARY/FEBRUARY TRIPS FROM MAINE TO SOUTH CAROLINA.
(3) EXCLUDES PACIFIC COAST SALMON FISHING TRIPS.

NOTE: PARTY BOAT ESTIMATES FOR THE SOUTH ATLANTIC AND GULF SUBREGIONS ARE EXCLUDED FROM THE PARTY/CHARTER BOAT COLUMN.

MARINE RECREATIONAL FISHERIES CATCH

ATLANTIC AND GULF COASTS

1979 – 1986

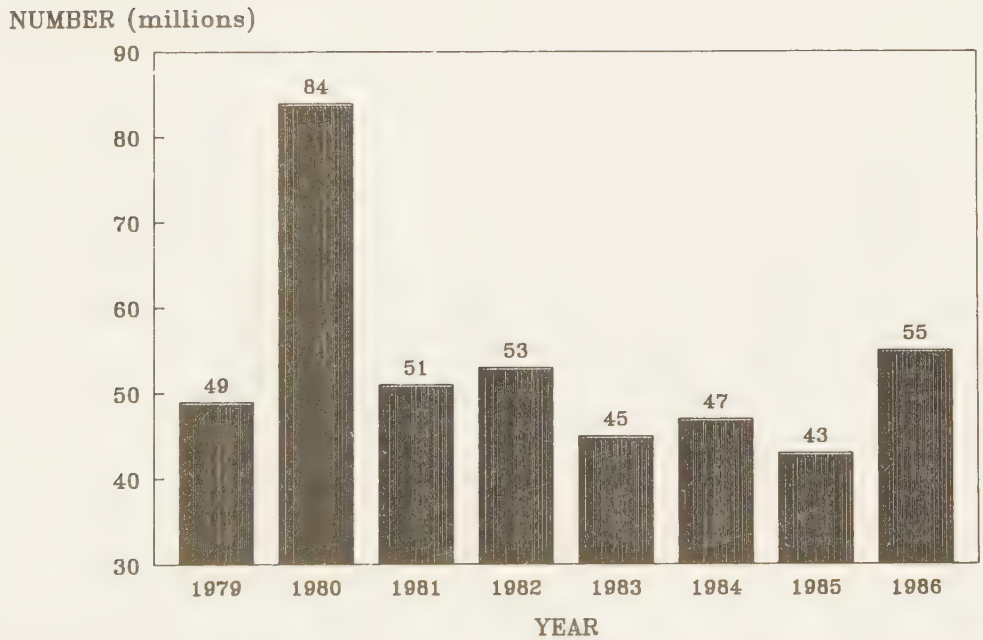


Note: 1986 data are preliminary.

MARINE RECREATIONAL FISHERIES CATCH

PACIFIC COAST

1979 – 1986

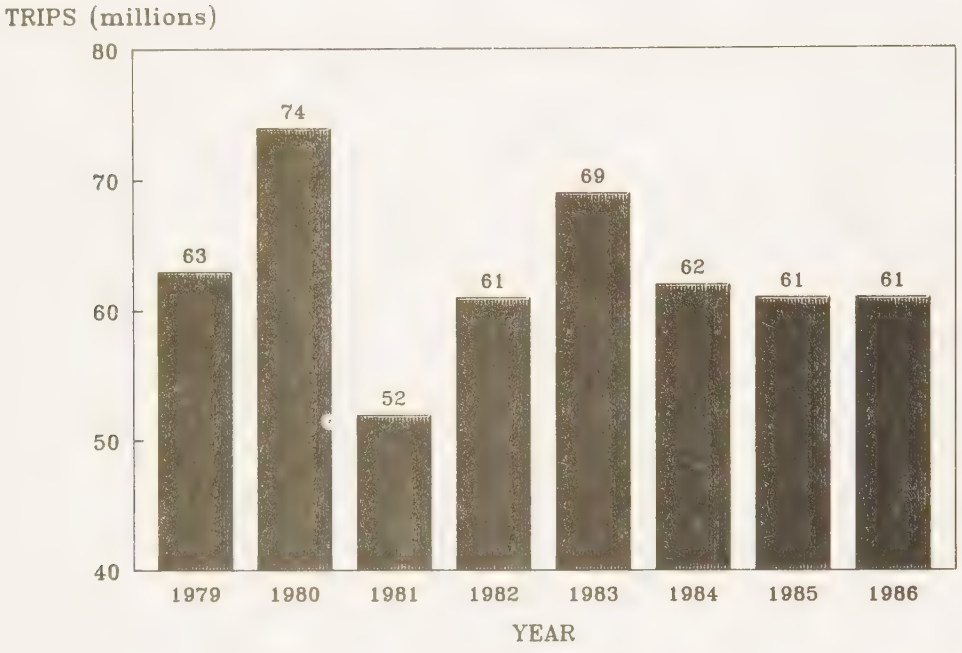


Data for 1979 are for July thru December.
Data for 1980-86 are for January thru December.
1986 data are preliminary.

MARINE RECREATIONAL FISHING TRIPS

ATLANTIC AND GULF COASTS

1979 – 1986

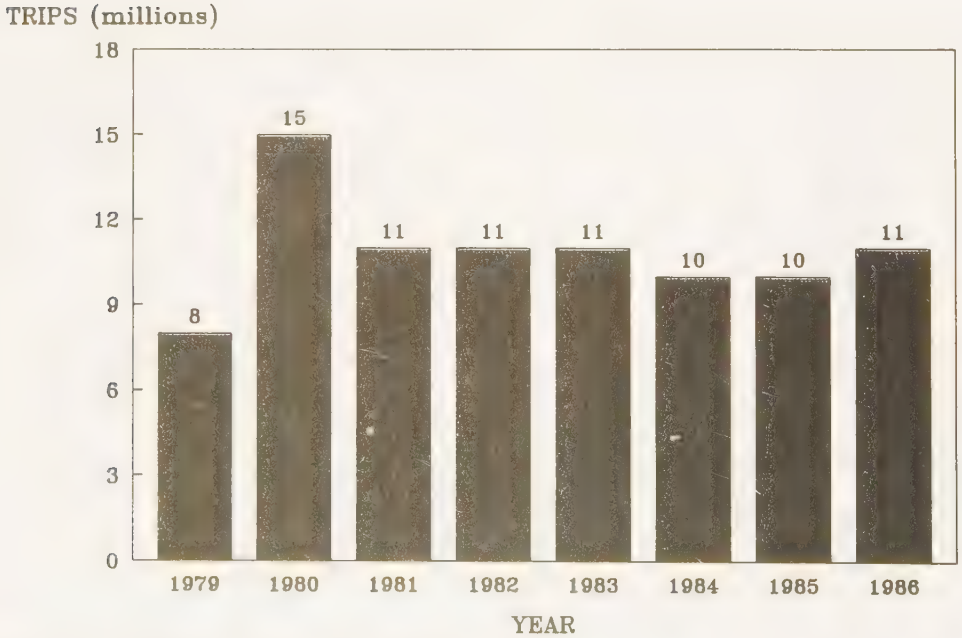


Note: 1986 data are preliminary.

MARINE RECREATIONAL FISHING TRIPS

PACIFIC COAST

1979 – 1986



Data for 1979 are for July thru December.
Data for 1980-86 are for January thru December.
1986 data are preliminary.

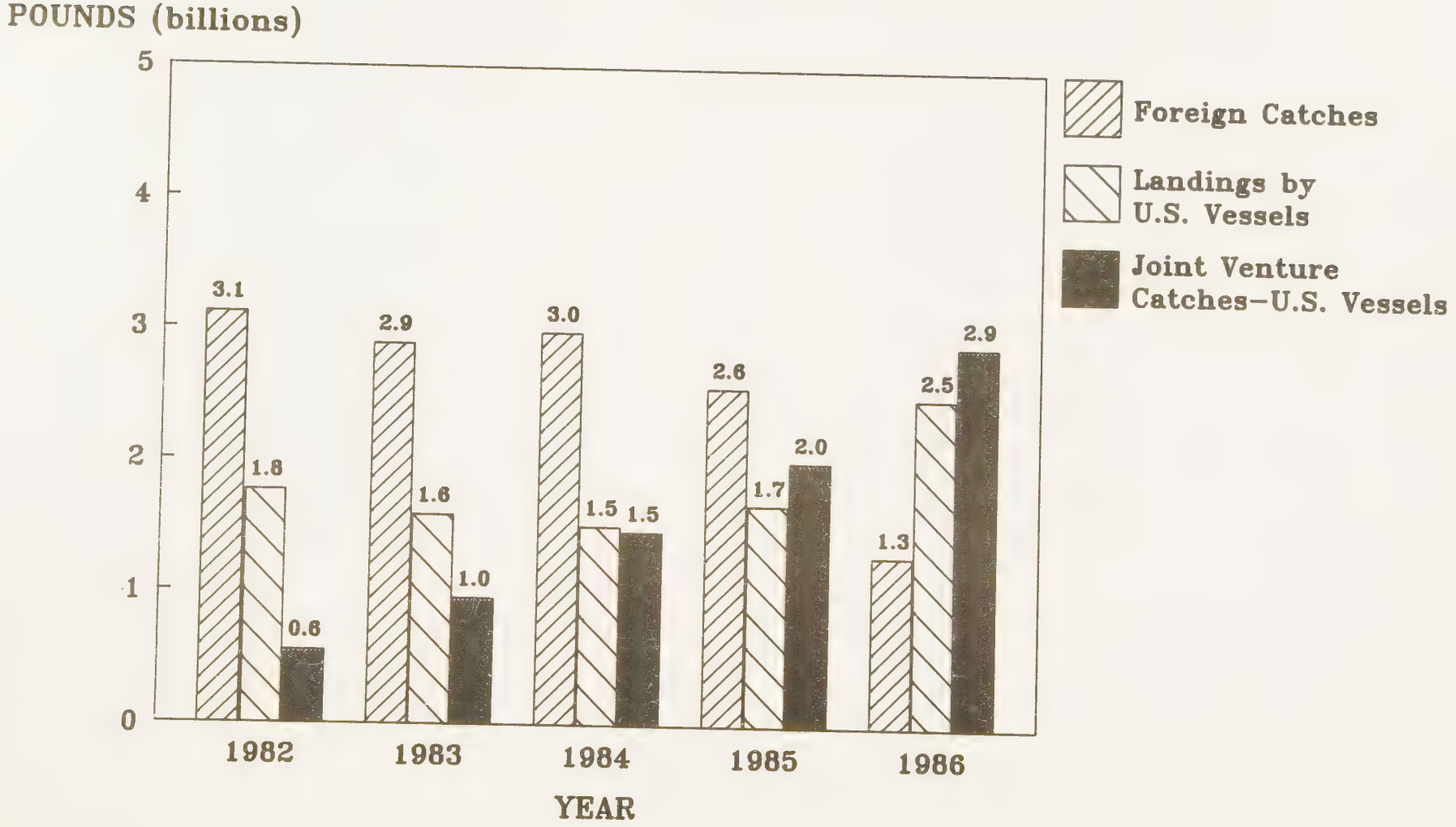
ESTIMATED CATCHES OF REEF FISH BY SOUTH ATLANTIC PARTYBOAT ANGLERS, BY AREA OF FISHING - 1985 (1)

Species Group	Location						
	North Carolina	South Carolina	Northeast Florida	Southeast Florida	Florida Keys	Dry Tortugas	Total
Red porgy							
Numbers	85,434	81,714	3,780	4,763	885	-	176,576
Weight(kg)	55,727	58,051	1,669	2,402	258	-	118,107
Other porgies							
Numbers	7,233	14,019	12,275	7,431	8,975	2,305	52,238
Weight(kg)	2,948	7,860	7,948	5,626	5,918	1,138	31,437
White Grunt							
Numbers	40,231	28,048	46	17,226	89,564	2,023	177,138
Weights(kg)	24,671	23,565	18	6,310	25,316	807	80,687
Other grunts							
Numbers	33,107	77,892	146,412	44,852	6,160	665	309,088
Weight(kg)	5,304	12,503	22,506	9,796	3,188	1,320	54,616
Vermilion snapper							
Numbers	43,907	106,273	284,923	81,568	13,116	16	529,803
Weight(kg)	24,387	44,539	70,925	25,375	3,584	5	168,814
Red snapper							
Numbers	8,426	2,183	38,072	1,603	38	14	50,336
Weight(kg)	14,211	5,338	38,085	2,217	47	14	59,912
Silk snapper							
Numbers	1,608	943	-	2,728	4,481	3	9,763
Weight(kg)	984	554	-	1,554	1,712	1	4,805
Yellowtail snapper							
Number	-	1	590	25,179	54,966	56,897	137,633
Weight(kg)	-	-	239	15,347	26,728	32,739	75,053
Lane snapper							
Numbers	-	-	1,270	16,507	23,791	304	41,872
Weight(kg)	-	-	559	6,946	6,751	194	14,451
Cubera snapper							
Numbers	-	-	-	12	11	2	25
Weight(kg)	-	-	-	30	27	8	65
Gray snapper							
Numbers	9	4	6,021	10,383	19,680	2,321	38,418
Weight(kg)	48	21	16,595	12,046	10,081	3,108	45,325
Mutton snapper							
Numbers	-	-	44	10,151	5,842	5,455	21,492
Weight(kg)	-	-	65	15,075	11,329	20,026	46,494
Schoolmaster							
Numbers	-	-	5	60	243	-	308
Weight(kg)	-	-	3	33	132	-	168
Other snappers							
Numbers	-	-	3	174	258	3	438
Weight(kg)	-	-	1	69	75	1	145
Grouper (Epinephelus)							
Numbers	635	3,894	770	5,929	3,197	1,838	16,263
Weight(kg)	915	6,292	4,204	10,999	4,698	3,658	30,766
Grouper (Mycteroperca)							
Numbers	9,099	6,070	6,989	1,621	1,379	757	25,895
Weight(kg)	26,824	22,215	34,515	8,218	3,312	3,677	98,761
Gray triggerfish							
Numbers	9,815	4,150	13,239	8,076	306	14	35,600
Weight(kg)	18,749	7,865	14,349	6,228	236	10	47,437
Gray tilefish (2)							
Numbers	5	613	4	50	6	-	678
Weight(kg)	8	1,118	7	88	10	-	1,231
King mackerel							
Numbers	441	377	1,027	27,824	1,899	108	31,676
Weight(kg)	2,048	1,829	4,102	95,105	5,643	367	109,094
Others							
Numbers	4,096	6,473	18,925	103,440	11,326	977	145,237
Weight(kg)	10,429	16,757	61,360	252,265	17,672	1,751	360,234
Total							
Numbers	244,046	332,654	534,375	369,577	246,123	73,702	1,800,477
Weight(kg)	187,253	208,508	277,150	475,727	126,717	68,823	1,344,178
Black Sea Bass Wt. (Kg)	36,101	153,632	72,133	8,486	-	-	270,352
Grand Total Wt. (Kg)	223,354	362,140	349,283	484,213	126,717	68,823	1,614,530
Total Angler Days	31,345	66,000	59,646	119,169	52,714	14,515	343,389

(1) Row and column totals may not add due to rounding. (2) Caulolatilus species.

Source: NMFS Beaufort Laboratory Partyboat Survey.
Northeast Florida = Jacksonville to St. Augustine
Southeast Florida = Fort Pierce to Miami

COMMERCIAL CATCHES IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ) 1982 – 1986



ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY CONTINENT AND COUNTRY, 1985

Continent and Country	North Atlantic (1)	California, Oregon, and Washington	Alaska			Grand total
			Gulf of Alaska Islands	Eastern Bering Sea and Aleutian	Total Alaska	
	Metric tons, round weight					
Europe:						
European Economic Community:						
Italy	19,733.0	-	-	-	-	19,733.0
Netherlands	(2)	-	-	-	-	(2)
Other:						
Faroe Island	(2)	-	-	-	-	(2)
German Democratic Republic	11,066.5	-	-	-	-	11,066.5
Poland	-	50,199.1	-	32,218.8	32,218.8	82,417.9
Spain	5,992.5	-	-	-	-	5,992.5
USSR	-	-	-	10,652.3	10,652.3	10,652.3
Asia:						
Japan	449.4	-	32,181.2	774,024.4	806,205.6	806,655.0
Republic of Korea	-	-	8,818.6	216,517.8	225,336.4	225,336.4
Grand total	37,241.4	50,199.1	40,999.8	1,033,413.3	1,074,413.1	1,161,853.6

(1) Cape Hatteras, North Carolina, northward. (2) Included with Italy.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY CONTINENT AND COUNTRY, 1986

Continent and Country	North Atlantic (1)	California, Oregon, and Washington	Alaska			Grand total
			Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	
	Metric tons, round weight					
Europe:						
European Economic Community:						
Italy	4,034.4	-	-	-	-	4,034.4
Spain (2)	2,725.6	-	-	-	-	2,725.6
Other:						
German Democratic Republic	19,025.9	-	-	-	-	19,025.9
Poland	-	70,752.5	-	6,781.7	6,781.7	77,534.2
Asia:						
China	-	-	-	2,001.9	2,001.9	2,001.9
Japan	(3)	-	15,850.7	369,852.7	385,703.4	385,703.4
Republic of Korea	-	-	-	97,327.7	97,327.7	97,327.7
Total	25,785.9	70,752.5	15,850.7	475,964.0	491,814.7	588,353.1

(1) Cape Hatteras, North Carolina, northward. (2) Joined the European Economic Community in 1986. (3) Included with Gulf of Alaska.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY SPECIES AND AREA, 1985

Species	North Atlantic (1)	Washington, Oregon, and California	Alaska			Grand total
			Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	
	Metric tons, round weight					
Finfish						
Atka mackerel	-	-	1.8	1.4	3.2	3.2
Butterfish	802.3	-	-	-	-	802.3
Cod, Pacific	-	-	9,085.7	57,177.4	66,263.1	66,263.1
Flounders, Pacific (flatfish)	-	1.4	170.0	147,546.2	147,716.2	147,717.6
Hake:						
Atlantic:						
Red	71.8	-	-	-	-	71.8
Silver (whiting)	1,253.9	-	-	-	-	1,253.9
Pacific (whiting)	-	49,853.2	-	-	-	49,853.2
Herring, river (alewives)	62.3	-	-	-	-	62.3
Jack mackerel	-	35.7	-	-	-	35.7
Mackerel, Atlantic	26,384.3	-	-	-	-	26,384.3
Ocean perch, Pacific	-	10.4	(2) 7.7	73.9	81.6	92.0
Pollock, Alaska	-	-	31,587.2	820,283.0	851,870.2	851,870.2
Rockfishes:						
Shortspine thornyhead	-	-	(2) 3.8	-	3.8	3.8
Other	-	169.4	(2) 2.0	44.0	46.0	215.4
Sablefish	-	23.7	(2) 38.5	312.1	350.6	374.3
Shark	(3)	-	-	-	-	(3)
Other finfish	1,100.8	105.3	96.9	6,282.9	6,379.8	7,585.9
Total fish	29,675.4	50,199.1	40,993.6	1,031,720.9	1,072,714.5	1,152,589.0
Shellfish et al.						
Snails (meats)	-	-	-	207.2	207.2	207.2
Squid:						
Atlantic:						
Short-finned	1,008.4	-	-	-	-	1,008.4
Long-finned	6,557.6	-	-	-	-	6,557.6
Pacific	-	-	6.2	1,485.2	1,491.4	1,491.4
Total shellfish	7,566.0	-	6.2	1,692.4	1,698.6	9 264.6
Grand total	37,241.4	50,199.1	40,999.8	1,033,413.3	1,074,413.1	1,161,853.6

(1) Cape Hatteras, North Carolina, northward. (2) Became a prohibited species during 1985. (3) Included with other finfish.
Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

ALL FOREIGN COUNTRIES: CATCH IN THE U.S. EXCLUSIVE ECONOMIC ZONE (EEZ), BY SPECIES AND AREA, 1986

Species	North Atlantic (1)	Washington, Oregon, and California	Alaska			Grand total
			Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	
	Metric tons, round weight					
Finfish						
Atka mackerel	-	-	(2)	2.4	2.4	2.4
Butterfish	125.1	-	-	-	-	125.1
Cod, Pacific	-	-	15,210.5	39,796.6	55,007.1	55,007.1
Flounders, Pacific (flatfish)	-	1.8	70.5	78,059.9	78,130.4	78,132.2
Hake:						
Atlantic:						
Red	.9	-	-	-	-	.9
Silver (whiting)	546.7	-	-	-	-	546.7
Pacific (whiting)	-	69,861.0	-	-	-	69,861.0
Herring, river (alewives)	14.7	-	-	-	-	14.7
Jack mackerel	-	549.3	-	-	-	549.3
Mackerel, Atlantic	19,143.5	-	-	-	-	19,143.5
Ocean perch, Pacific	-	1.4	.2	17.9	18.1	19.5
Pollock, Alaska	-	-	113.9	352,567.7	352,681.6	352,681.6
Rockfishes	-	193.5	4.0	18.0	22.0	215.5
Sablefish	-	7.4	1.4	107.1	108.5	115.9
Other finfish	844.5	138.1	(3) 450.2	4,051.2	4,501.4	5,484.0
Total fish	20,675.4	70,752.5	15,850.7	474,620.8	490,471.5	581,899.4
Shellfish et al.						
Snails (meats)	-	-	-	495.5	495.5	495.5
Squid:						
Atlantic:						
Short-finned	248.7	-	-	-	-	248.7
Long-finned	4,861.8	-	-	-	-	4,861.8
Pacific	-	-	-	847.7	847.7	847.7
Total shellfish	5,110.5	-	-	1,343.2	1,343.2	6,453.7
Grand total	25,785.9	70,752.5	15,850.7	475,964.0	491,814.7	588,353.1

(1) Cape Hatteras, North Carolina, northward. (2) Less than 0.1 metric ton. (3) Includes a small catch from the North Atlantic.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86

Country and species	1984	1985	1986
	Metric tons, round weight		
European Economic Community:			
Italy:			
Butterfish	162.9	173.1	83.5
Hake:			
Red	10.5	30.9	(1)
Silver (whiting)	208.1	938.5	332.9
Herring, river (alewives)	(1)	38.8	-
Mackerel, Atlantic	3,962.6	15,347.5	232.1
Other finfish	659.7	537.9	571.0
Squid:			
Short-finned	139.4	23.2	79.7
Long-finned	6,088.6	2,643.1	2,735.2
Total	11,231.8	19,733.0	4,034.4
Netherlands:			
Butterfish	(2)	(2)	-
Hake, silver (whiting)	-	(2)	-
Herring river (alewives)	(2)	(2)	-
Mackerel, Atlantic	(2)	(2)	-
Other finfish	(2)	(2)	-
Squid:			
Short-finned	(2)	(2)	-
Long-finned	(2)	(2)	-
Total	(2)	(2)	-
Total, European Economic Community	11,231.8	19,733.0	(3)
Spain:			
Butterfish	151.4	597.5	37.9
Hake:			
Red	45.2	40.9	0.9
Silver (whiting)	156.3	274 2	200.9
Herring, river (alewives)	-	-	(1)
Mackerel, Atlantic	16.1	12.9	15.9
Other finfish	145.0	335.6	174.4
Squid:			
Short-finned	407.7	980.0	169.0
Long-finned	3,159.5	3,751.4	2,126.6
Total	4,081.2	5,992.5	2,725.6
Total, European Economic Community	-	-	6,760.0

See note at end of table.

(Continued)

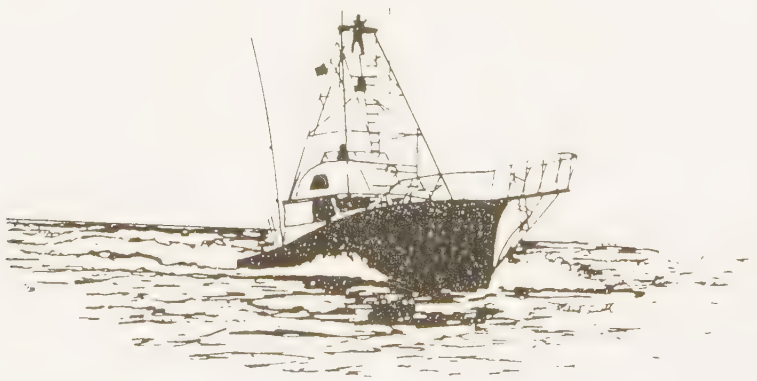
FOREIGN CATCH

NORTH ATLANTIC: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86 - Continued

Country and species	1984	1985	1986
	Metric tons, round weight		
Faroe Islands, Shark	-	(2)	-
German Democratic Republic:			
Butterfish	-	(1)	3.7
Hake, silver (whiting)	(1)	(1)	12.9
Herring, river (alewives)	(1)	23.5	14.7
Mackerel, Atlantic	5,450.4	11,023.9	18,895.5
Other finfish	11.1	19.1	99.1
Squid, long-finned	-	(1)	(1)
Total	5,461.5	11,066.5	19,025.9
Japan:			
Butterfish	115.2	31.7	(4)
Hake:			
Red	(1)	(1)	-
Silver (whiting)	(1)	41.2	(4)
Herring, river (alewives)	(1)	-	(4)
Mackerel, Atlantic	48.4	-	(4)
Other finfish	198.2	208.2	(4)
Squid:			
Short-finned	90.6	5.2	(4)
Long-finned	1,781.0	163.1	(4)
Total	2,233.4	449.4	(4)
Grand total	23,007.9	37,241.4	25,785.9

(1) Included with other finfish. (2) Included with Italy. (3) Spain joined the EEC in 1986. (4) Included with other finfish for Gulf of Alaska.

Note:--Excludes tunas and prohibited species. For further information see text on page iv FOREIGN CATCH IN U.S. EEZ. Catches are for calendar year only. Some fishing years overlap 2 calendar years.



WASHINGTON, OREGON, AND CALIFORNIA:
FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86

Country and species	1984	1985	1986
	Metric tons, round weight		
Poland:			
Flounders (flatfish)	0.0	1.4	1.8
Hake, Pacific (whiting)	14,310.1	49,853.2	69,861.0
Jack mackerel	115.2	35.7	549.3
Ocean perch, Pacific	.7	10.4	1.4
Rockfishes	173.0	169.4	193.5
Sablefish	.3	23.7	7.4
Other finfishes	8.6	105.3	138.1
Total	14,607.9	50,199.1	70,752.5
USSR:			
Hake, Pacific (whiting)	462.3	-	-
Jack mackerel	.3	-	-
Ocean perch, Pacific	.3	-	-
Rockfishes	7.0	-	-
Sablefish	.2	-	-
Other finfishes	4.0	-	-
Total	474.1	-	-
Grand total	5,082.0	50,199.1	70,752.5

Note:--Excludes tunas and prohibited species. Catches are for calendar year only.

U.S. EXCLUSIVE ECONOMIC ZONE

FOREIGN CATCH

GULF OF ALASKA: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86

Country and species	1984	1985	1986
	Metric tons, round weight		
Japan:			
Atka mackerel	531.7	0.3	(1)
Cod, Pacific	15,250.5	9,060.5	15,210.5
Flounders (2)	2,189.9	47.2	70.5
Ocean perch, Pacific (3)	2,493.9	2.5	.2
Pollock, Alaska	57,874.2	22,937.3	113.9
Rockfishes:			
Shortspine thornyhead	158.4	3.6	-
Other	376.3	1.1	4.0
Sablefish (3)	843.1	30.1	1.4
Other finfish	467.8	94.6	(4) 450.2
Squid, unclassified	99.6	4.0	-
Total	80,285.4	32,181.2	15,850.7
Poland:			
Cod, Pacific	10.1	-	-
Flounders (2)	23.0	-	-
Ocean perch, Pacific (3)	13.8	-	-
Pollock, Alaska	2,831.6	-	-
Rockfishes:			
Shortspine thornyhead	1.2	-	-
Other	.8	-	-
Sablefish (3)	7.6	-	-
Other finfish	20.8	-	-
Squid, unclassified	3.2	-	-
Total	2,912.1	-	-
Republic of Korea:			
Atka mackerel	4.0	1.5	-
Cod, Pacific	636.2	25.2	-
Flounders (2)	819.8	122.8	-
Ocean perch, Pacific (3)	91.0	5.2	-
Pollock, Alaska	38,553.5	8,649.9	-
Rockfishes:			
Shortspine thornyhead	5.3	.2	-
Other	37.1	.9	-
Sablefish (3)	255.9	8.4	-
Other finfish	87.1	2.3	-
Squid, unclassified	17.1	2.2	-
Total	40,507.0	8,818.6	-
Grand total	123,704.5	41,999.8	15,850.7

(1) Less than 0.1of a metric ton.
(2) May include yellowfin sole.
(3) Became a prohibited species during 1985.
(4) A small catch from the North Atlantic has been included with other finfish.

Note:--Excludes tunas and prohibited species. Catches are for calendar year only.

FOREIGN CATCH

EASTERN BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86

Country and species	1984	1985	1986
	Metric tons, round weight		
European Economic Community:			
Federal Republic of Germany:			
Atka mackerel	0.4	-	-
Cod, Pacific	85.5	-	-
Flounders (1)	3.8	-	-
Ocean perch, Pacific	2.3	-	-
Pollock, Alaska	23,757.1	-	-
Rockfishes	1.7	-	-
Sablefish	1.6	-	-
Other finfish	4.4	-	-
Squid, unclassified	15.9	-	-
Total	23,871.7	-	-
China:			
Cod Pacific	-	-	182.5
Flounders (1)	-	-	363.5
Pollock, Alaska	-	-	1,443.2
Rockfishes	-	-	.4
Sablefish	-	-	.1
Other finfish	-	-	12.2
Squid, unclassified	-	-	(2)
Total	-	-	2,001.9
Japan:			
Atka mackerel	103.5	1.1	1.1
Cod, Pacific	47,590.2	51,974.5	35,554.1
Flounders (1)	133,175.6	95,237.2	66,899.4
Ocean perch, Pacific	666.0	58.1	14.3
Pollock, Alaska	664,933.0	620,112.2	262,732.2
Rockfishes	178.3	42.1	13.6
Sablefish	1,722.7	257.1	73.1
Other finfish	5,708.8	4,768.1	3,232.8
Snails (meats)	230.1	104.1	495.5
Squid, unclassified	2,939.2	1,469.9	836.6
Total	857,247.4	774,024.4	369,852.7
Poland:			
Atka mackerel	(2)	(2)	.1
Cod, Pacific	65.5	29.3	8.4
Flounders (1)	31.0	10.8	4.4
Ocean perch, Pacific	9.5	6.8	.2
Pollock, Alaska	52,070.3	32,060.9	6,759.9
Rockfishes	1.1	.5	.2
Sablefish	5.0	2.2	(2)
Other finfish	7.3	5.2	1.1
Squid, unclassified	51.9	103.1	7.4
Total	52,241.6	32,218.8	6,781.7
Portugal:			
Cod, Pacific	50.6	-	-
Flounders (1)	71.7	-	-
Pollock, Alaska	48.1	-	-
Sablefish	7.2	-	-
Other finfish	4.3	-	-
Squid, unclassified	.1	-	-
Total	182.0	-	-

See note at end of table.

(Continued)

FOREIGN CATCH

EASTERN BERING SEA AND ALEUTIAN ISLANDS: FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86 - Continued

Country and species	1984	1985	1986
	Metric tons, round weight		
Republic of Korea:			
Atka mackerel	7.6	0.3	1.2
Cod, Pacific	10,030.8	4,885.2	4,051.6
Flounders (1)	43,160.6	43,472.6	10,792.6
Ocean perch, Pacific	36.3	8.9	3.4
Pollock, Alaska	179,913.8	166,606.3	81,632.4
Rockfishes	10.7	1.4	3.8
Sablefish	186.1	52.7	33.9
Other finfish	1,624.8	1,475.8	805.1
Squid, unclassified	109.6	14.6	3.7
Total	235,080.3	216,517.8	97,327.7
USSR:			
Cod, Pacific	687.6	288.4	-
Flounders (1)	9,665.0	8,825.6	-
Ocean perch, Pacific	12.0	.1	-
Pollock, Alaska	12,267.5	1,503.6	-
Rockfishes	1.7	-	-
Sablefish	.2	.1	-
Other finfish	182.7	33.8	-
Squid, unclassified	16.0	.7	-
Total	22,832.7	10,652.3	-
Grand total	1,191,456.7	1,033,413.3	475,964.0

(1) May include yellowfin sole. (2) Less than .1 metric ton.

Note:--Excludes tunas and prohibited species. Catches are for calendar year only.

HAWAII AND PACIFIC ISLANDS (WESTERN PACIFIC SEAMOUNT GROUNDFISH FISHERY): FOREIGN CATCH, BY COUNTRY AND SPECIES, 1984-86

Country and species	1984	1985	1986
	Metric tons, round weight		
Japan:			
Alfonsins and armorheads	72.7	-	-

Note:--Excludes tunas and prohibited species.

U.S. AND WORLD COMMERCIAL FISHERY CATCHES, 1952-85

Year	U.S. commercial catch and exvessel value			World commercial catch				
	Published by U.S. (excludes weight of mollusk shells)	Published by FAO (1)	Exvessel value	Freshwater	Marine			Grand total
					Peruvian anchovy	Other (2)	Total	
	Million metric tons Live weight		Billion dollars	Million metric tons Live weight				
1952	2.0	2.4	0.4	2.8	-	22.3	22.3	25.1
1953	2.0	2.7	.4	3.0	-	22.9	22.9	25.9
1954	2.2	2.8	.4	3.2	-	24.4	24.4	27.6
1955	2.2	2.8	.3	3.4	-	25.5	25.5	28.9
1956	2.4	3.0	.4	3.5	0.1	27.2	27.3	30.8
1957	2.2	2.8	.4	3.9	.3	27.5	27.8	31.7
1958	2.2	2.7	.4	4.5	.8	28.0	28.8	33.3
1959	2.3	2.9	.4	5.1	2.0	29.8	31.8	36.9
1960	2.2	2.8	.4	5.6	3.5	31.1	34.6	40.2
1961	2.4	2.9	.4	5.7	5.3	32.6	37.9	43.6
1962	2.4	3.0	.4	5.8	7.1	31.9	39.0	44.8
1963	2.2	2.8	.4	5.9	7.2	33.5	40.7	46.6
1964	2.1	2.6	.4	6.2	9.8	35.9	45.7	51.9
1965	2.2	2.7	.4	7.0	7.7	38.5	46.2	53.2
1966	1.9	2.5	.5	7.3	9.6	40.4	50.0	57.3
1967	1.8	2.4	.4	7.2	10.5	42.7	53.2	60.4
1968	1.9	2.5	.5	7.4	11.3	45.2	56.5	63.9
1969	1.9	2.5	.5	7.6	9.7	45.4	55.1	62.7
1970	2.2	2.8	.6	8.4	13.1	46.6	59.7	65.6
1971	2.3	2.9	.7	9.0	11.2	48.3	59.5	66.1
1972	2.2	2.8	.7	5.7	4.8	53.7	58.5	62.0
1973	2.2	2.8	.9	5.7	1.7	55.3	57.0	62.7
1974	2.3	2.8	.9	5.8	4.0	56.7	60.7	66.5
1975	2.2	2.8	1.0	6.2	3.3	56.9	60.2	66.4
1976	2.4	3.0	1.3	5.9	4.3	59.6	63.9	69.8
1977	2.4	3.0	1.5	6.1	.8	62.0	62.8	68.9
1978	2.7	3.4	1.9	5.8	1.2	63.4	64.6	70.4
1979	2.8	3.5	2.2	5.9	1.4	63.8	65.2	71.1
1980	2.9	3.6	2.2	6.2	.7	65.1	65.8	72.0
1981	2.7	3.8	2.4	6.6	1.2	67.0	68.2	74.8
1982	2.9	4.0	2.4	6.8	1.7	68.3	70.0	76.8
1983	2.9	4.3	2.4	7.5	0.1	69.7	69.8	77.3
1984	2.9	4.8	2.3	7.8	0.1	75.2	75.3	83.1
1985	2.8	4.8	2.3	8.4	0.1	76.4	76.5	84.9

(1) Includes U.S.-flag vessel landings at foreign ports, transfer of catches onto foreign vessels within the U.S. FCZ (joint ventures), and the weight of mollusk shells. (2) Includes diadromous, salmon and other anadromous fishes, and catadromous fishes such as eels.

Note:--There are 2,204.6 pounds in a metric ton. Prior to 1970, the world commercial catch of whales and seals is excluded. For the years 1970-1985 data for marine mammals and aquatic plants are excluded. There is a revision in the total world commercial catch back to 1970 as published in FAO Yearbook of Fishery Statistics, Vol. 48 and 50. However, prior to 1974, data on freshwater and marine catches were not revised. Therefore, for the years 1970 to 1973, data will not add to the grand total.

Source:--Fishery Statistics of the United States; Fisheries of the United States; Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, Rome; for various issues.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY COUNTRIES, 1981-85
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS)

Country	1981(1)	1982(1)	1983(1)	1984(1)	1985
	Thousand metric tons Live weight				
Japan	10,740	10,827	11,255	12,021	11,444
USSR	9,546	9,957	9,757	10,593	10,523
China	4,377	4,927	5,213	5,927	6,779
Chile	3,385	3,673	3,978	4,499	4,804
United States (2)	3,767	3,988	4,258	4,814	4,767
Peru	2,741	3,529	1,580	3,340	4,168
India	2,450	2,373	2,504	2,855	2,810
Republic of Korea	2,366	2,281	2,400	2,477	2,650
Thailand	1,989	2,120	2,260	2,135	2,124
Norway	2,552	2,501	2,836	2,466	2,107
Indonesia	1,919	1,982	2,205	1,993	2,067
Philippines	1,687	1,788	1,978	1,935	1,868
Korea (3)	1,500	1,550	1,600	1,650	1,700
Denmark	1,852	1,927	1,863	1,846	1,696
Iceland	1,441	789	839	1,535	1,680
Canada	1,417	1,404	1,349	1,283	1,426
Spain	1,257	1,374	1,313	1,338	1,338
Mexico	1,536	1,321	1,064	1,104	1,226
Brazil	820	831	874	949	959
Ecuador	564	665	312	841	901
France	781	751	781	778	845
United Kingdom	883	912	852	848	842
Vietnam	622	640	710	765	800
Bangladesh	687	725	729	754	764
Poland	630	608	735	719	683
Republic of South Africa	607	622	601	571	650
Burma	595	584	588	610	644
Maylasia	804	683	741	665	632
Turkey	470	503	557	567	576
Netherlands	434	505	506	432	504
Italy	450	476	478	500	504
Morocco	391	364	454	467	473
Argentina	362	475	416	314	411
Pakistan	318	337	343	372	408
Faeroe Islands	242	249	330	347	362
Portugal	261	255	248	285	299
New Zealand	212	232	282	294	283
All others	8,186	8,036	8,468	8,207	8,229
Total	74,841	76,764	77,257	83,096	84,946

(1) Revised.
(2) Includes the weight of clam, oyster, scallop, and other mollusk shells. This weight is not included in U.S. landings statistics shown elsewhere.
(3) Data estimated by FAO.

Note:--Statistics for mariculture, aquaculture, and other kinds of fish farming, etc., except for the United States are included in country totals. Statistics on quantities caught by recreational fishermen are excluded.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1985; Vol. 60, Rome.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY CONTINENTS, 1981-85
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Continent	1981(1)	1982(1)	1983(1)	1984(1)	1985
	Thousand metric tons Live weight				
Asia	32,557	33,169	35,005	36,713	37,292
Europe	12,539	12,161	12,621	12,940	12,529
South America	8,336	9,623	7,621	10,446	11,796
USSR	9,546	9,957	9,757	10,593	10,523
North and Central America	7,275	7,252	7,266	7,751	8,191
Africa	4,102	4,099	4,413	4,059	4,041
Oceania	487	502	574	595	573
Total (2)	74,841	76,764	77,257	83,096	84,946

(1) Revised.
(2) May not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1985; Vol. 60, Rome.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY MAJOR FISHING AREAS, 1981-85
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Area	1981(1)	1982(1)	1983(1)	1984(1)	1985
	Thousand metric tons Live weight				
Marine areas:					
Pacific Ocean and adjacent areas	37,569	39,211	38,551	44,053	45,733
Atlantic Ocean and adjacent areas	25,376	25,196	25,524	25,211	24,626
Indian Ocean and adjacent areas	3,735	3,879	4,015	4,340	4,466
Total	66,680	68,286	68,090	73,604	74,825
Inland waters:					
Asia	5,145	5,336	5,869	6,084	6,749
Africa	1,392	1,461	1,530	1,530	1,460
USSR	808	804	797	881	906
Europe	368	396	394	400	428
South America	295	314	328	336	319
North and Central America	151	162	246	256	254
Oceania	2	4	4	5	5
Total	8,161	8,477	9,168	9,492	10,121
Grand total (2)	74,841	76,764	77,257	83,096	84,946

(1) Revised.
(2) May not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1985; Vol. 60, Rome.

WORLD COMMERCIAL CATCH OF FISH, CRUSTACEANS, AND MOLLUSKS, BY SPECIES GROUPS, 1981-85
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Species group	1981(1)	1982(1)	1983(1)	1984(1)	1985
	Thousand metric tons Live weight				
Herring, sardines, anchovies, etc.	17,035	17,948	17,583	19,701	21,177
Cods, hakes, haddocks, etc.	10,651	10,974	11,219	12,252	12,408
Miscellaneous marine and diadromous fishes.	8,527	8,476	8,636	8,787	8,926
Freshwater fishes	6,629	6,836	7,495	7,763	8,429
Jacks, mullets, sauries, etc.	8,038	7,816	7,975	8,547	7,985
Mollusks.	5,345	5,673	5,772	6,178	6,102
Redfish, basses, congers, etc.	5,345	5,441	5,020	5,485	5,265
Mackerels, snoeks, cutlass-fishes, etc.	3,964	3,849	3,670	4,282	3,714
Crustaceans	3,200	3,394	3,202	3,202	3,419
Tunas, bonitos, billfishes, etc.	2,650	2,790	2,940	3,111	3,154
Flounders, halibuts, soles, etc.	1,091	1,136	1,125	1,192	1,351
Salmons, trouts, smelts, etc.	875	812	929	887	1,096
Shads, milkfishes, etc.	532	591	562	724	766
Sharks, rays, chimaeras, etc.	629	631	586	607	607
River eels.	81	84	85	95	96
Sturgeons, paddlefishes, etc.	29	29	28	27	27
Miscellaneous	221	281	428	255	424
Total (2).	74,841	76,764	77,257	83,096	84,946

(1) Revised.
(2) May not add to total because of rounding.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1985; Vol. 60, Rome.

DISPOSITION OF WORLD COMMERCIAL CATCH, 1980-84
(DOES NOT INCLUDE MARINE MAMMALS AND AQUATIC PLANTS.)

Item	1980(1)	1981(1)	1982(1)	1983(1)	1984
	Percent of total				
Marketed fresh.	21.8	22.7	21.4	21.5	20.9
Frozen.	22.0	22.2	23.4	23.7	23.9
Canned.	14.3	14.0	13.2	13.2	12.7
Cured	15.4	15.1	15.0	15.3	14.8
Reduced to meal and oil (2)	25.5	25.0	26.0	25.3	26.6
Miscellaneous purposes.	1.0	1.0	1.0	1.0	1.1
Total.	100.0	100.0	100.0	100.0	100.0

(1) Revised.
(2) Only whole fish destined for the manufacture of oils and meals is included. Raw material for reduction derived from fish primarily destined for marketing fresh, frozen, canned, cured, and miscellaneous purposes is excluded; such waste quantities are included under the other disposition channels.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1984; Vol. 59, Rome.

WORLD IMPORTS AND EXPORTS OF SEVEN FISHERY COMMODITY GROUPS, BY LEADING COUNTRIES, 1981-84

Country	1981 (1)	1982 (1)	1983 (1)	1984
	Thousand U.S. dollars			
IMPORTS				
Japan	3,736,768	3,973,739	3,946,656	4,142,937
United States	2,988,195	3,174,633	3,621,138	3,702,490
France	1,042,791	1,035,955	1,049,966	975,596
United Kingdom	994,448	885,331	911,115	877,159
Fed. Republic of Germany	818,864	823,189	831,142	800,615
Italy	720,247	752,537	735,537	742,066
Hong Kong	361,504	469,351	439,950	439,924
Spain	504,911	526,340	398,833	389,919
Canada	298,680	281,406	335,526	373,031
Denmark	304,685	298,059	309,911	326,611
Belgium	347,710	326,926	318,880	297,488
Netherlands	330,452	309,790	272,285	288,218
Sweden	269,928	267,591	261,198	257,317
Australia	225,490	220,517	199,931	228,366
Singapore	162,108	183,907	200,033	224,133
Switzerland	205,707	193,191	194,426	188,971
Portugal	157,876	182,372	139,919	139,242
Nigeria (2)	576,977	357,760	280,053	138,029
USSR	76,406	70,637	133,338	137,844
Other countries	2,485,658	2,299,127	2,100,151	1,999,629
Total	16,609,405	16,632,358	16,679,988	16,669,585
EXPORTS				
Canada	1,260,809	1,299,651	1,277,287	1,237,337
United States	1,142,026	1,032,248	996,651	923,890
Norway	1,001,677	888,348	977,934	902,866
Denmark	940,401	901,473	928,365	898,867
Japan	863,252	800,557	787,633	881,965
Republic of Korea	834,940	758,464	734,602	776,967
Thailand	412,451	482,012	544,939	632,960
Iceland	712,635	538,734	527,167	509,245
Netherlands	511,630	503,622	511,400	500,543
Mexico	494,479	396,178	436,751	468,234
Chile	326,554	386,340	419,048	419,373
Australia	269,496	313,918	322,490	345,664
India	317,300	354,943	352,269	331,155
Spain	439,870	289,277	280,405	307,811
China (2)	324,562	314,409	281,790	303,598
USSR	242,640	218,042	324,037	303,598
United Kingdom	307,603	289,492	311,880	302,171
Fed. Republic of Germany	279,265	315,878	305,828	295,510
France	304,043	292,733	315,622	293,586
Other countries	4,825,829	4,947,251	5,120,244	5,319,469
Total	15,811,462	15,323,570	15,756,342	15,955,091

(1) Revised. (2) Estimated by FAO.

Note:--Data on imports and exports cover the international trade of 158 countries. The total value of exports is consistently less than the total value of imports, probably because charges for insurance, freight, and similar expenses were included in the import value but not in the export value. The seven fishery commodity groups covered by this table are: 1. Fish, fresh, chilled or frozen; 2. Fish, dried, salted, or smoked; 3. Crustaceans and mollusks, fresh, frozen, dried, salted, etc.; 4. Fish products and preparations, whether or not in airtight containers; 5. Crustacean and mollusk products and preparations, whether or not in airtight containers; 6. Oils and fats, crude or refined, of aquatic animal origin; and 7. Meals, solubles, and similar animal foodstuffs of aquatic animal origin.

Source:--Food and Agriculture Organization of the United Nations (FAO) - Yearbook of Fishery Statistics, 1984; Vol. 59, Rome.

WORLD COMMERCIAL CATCH BY LEADING COUNTRIES

(LIVE WEIGHT)

1976 – 1985

VALUE OF PROCESSED FISHERY PRODUCTS, 1985 AND 1986
(Processed from domestic catch and imported products)

Item	1985 (1)		1986 (2)	
	Thousand dollars	Percent of total	Thousand dollars	Percent of total
Edible:				
Fresh and frozen.	3,242,382	65.7	3,376,867	65.0
Canned.	1,269,311	25.7	1,393,881	26.8
Cured	149,564	3.0	153,000	2.9
Total edible.	4,661,257	94.4	4,923,748	94.7
Industrial:				
Bait and animal food (canned)	91,003	1.9	100,497	1.9
Fish meal, oil, and solubles	144,724	2.9	138,717	2.7
Other	39,403	.8	37,038	.7
Total industrial. . . .	275,130	5.6	276,252	5.3
Grand total	4,936,387	100.0	5,200,000	100.00

(1) Revised.
(2) Preliminary.

Note:--Includes value of sealskins. Value is based on selling price at the plant. Processed Fishery Products Annual Summary, 1986, Current Fishery Statistics No. 8387 will provide additional information.

U.S. PRODUCTION OF FISH STICKS, FISH PORTIONS, AND BREADED SHRIMP, 1977-86

Year	Fish sticks		Fish portions		Breaded shrimp	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1977.	87,230	68,727	355,443	341,760	97,518	216,551
1978.	94,674	86,712	389,430	415,892	110,888	258,467
1979.	96,050	99,790	*396,089	*429,164	98,993	277,460
1980.	88,429	88,762	344,249	388,430	83,182	254,283
1981.	88,972	96,754	328,407	388,722	85,177	282,026
1982.	91,178	105,516	304,104	385,894	94,391	337,604
1983.	86,928	*115,556	335,270	410,858	100,106	*386,222
1984.	92,441	109,677	333,212	413,789	94,522	369,415
1985.	96,239	111,265	330,362	367,734	95,341	354,808
1986 (1).	72,638	80,287	356,034	411,677	105,270	348,580

(1) Data for 1986 include only those firms reporting quarterly. Data for previous years include firms reporting annually or quarterly. *Record. Records--1973 fish sticks production: 127,156,000 lb; 1973 breaded shrimp production: 111,922,000 lb.

Note:--Processed Fishery Products, Annual Summary, 1986, Current Fishery Statistics No. 8387 will provide additional information.

PROCESSED FISHERY PRODUCTS

FISH FILLETS AND STEAKS

PRODUCTION OF FRESH AND FROZEN FILLETS AND STEAKS, BY SPECIES, 1985 AND 1986

Species	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Fillets:				
Anglerfish	5,051	8,473	3,795	7,900
Carp	2,495	1,517	2,125	1,280
Cod	57,069	89,169	62,742	127,205
Cusk	1,408	1,944	1,404	2,080
Flounders	69,090	157,152	60,674	166,911
Groundfish mixed	2,458	4,391	1,072	2,405
Groupers	1,172	4,448	1,312	4,933
Haddock	7,479	18,967	7,852	24,379
Hake, Atlantic	1,139	1,668	1,864	2,832
Halibut	515	1,573	390	1,515
Lingcod	1,800	2,618	1,232	1,839
Ocean perch:				
Atlantic	2,357	3,309	2,794	6,403
Pacific	1,829	2,381	1,403	1,996
Ocean pout	1,401	772	(1)	(1)
Pollock:				
Atlantic	14,473	16,663	16,073	20,217
Alaska	10,761	9,890	23,620	24,943
Rockfishes	18,086	25,105	16,608	23,935
Sablefish	3,862	4,471	2,837	4,301
Salmon	4,077	10,700	5,863	15,861
Sea trout	478	553	526	763
Shark	6,439	4,004	4,480	3,133
Snapper:				
Red	719	3,118	629	2,786
Unclassified	125	671	128	681
Spanish mackerel	1,531	1,942	1,405	1,831
Turbot	879	762	472	421
Whitefish	404	855	374	849
Wolffish	308	503	194	290
Yellow perch	922	2,967	939	3,924
Yellow pike	224	867	155	593
Unclassified	13,894	26,376	21,357	39,351
Total	232,445	407,829	244,319	495,557
Steaks:				
Cod	319	627	352	650
Halibut	7,160	16,785	8,612	22,411
King mackerel	152	404	(1)	(1)
Salmon	3,068	8,213	5,873	16,722
Shark	130	132	33	48
Swordfish	634	2,171	480	2,018
Tuna	840	1,644	(1)	(1)
Unclassified	777	2,287	520	1,210
Total	13,080	32,263	15,870	43,059
Grand total	245,525	440,092	260,189	538,616

(1) Included with unclassified. Note:--The following amounts of frozen fish blocks were produced from the fillets reported above: 2,551,000 lb valued at $2,585,000 in 1985 and 3,919,000 lb valued at $4,537,000 in 1986. Final data for 1986 will be published in Processed Fishery Products, Annual Summary, 1986, Current Fishery Statistics No. 8387.

Note:--Data shown contain more production for individual species, than in the U.S. production of fish fillets and steaks.

CANNED FISHERY PRODUCTS

PRODUCTION OF CANNED FISHERY PRODUCTS, BY SPECIES, 1985 AND 1986

Species	Pounds per case	1985 Standard cases	1985 Thousand pounds	1985 Thousand dollars	1986 Standard cases	1986 Thousand pounds	1986 Thousand dollars
For human consumption:							
Fish:							
Gefiltefish.	48	469,474	22,535	13,702	487,620	23,406	19,045
Herring.	48	62,460	2,998	5,599	140,635	6,750	10,999
Mackerel	45	340,513	15,323	6,614	376,109	18,053	6,770
Roe and caviar	48	17,130	822	3,356	16,725	803	3,556
Salmon:							
Natural	48	3,311,313	158,943	227,635	2,957,602	141,965	265,464
Specialties	48	5,180	249	1,020	6,555	315	1,399
Sardines, Maine. . . .	23.4	855,393	20,016	37,784	666,701	15,601	27,736
Tuna:							
Solid (1).	19.5	6,380,922	124,428	252,211	7,612,889	148,451	300,211
Chunk.	19.5	21,533,742	419,908	567,905	24,985,052	487,209	580,231
Flakes and grated. .	18	36,483	657	653	65,070	1,171	1,076
Total tuna.	--	27,951,147	544,993	820,769	32,663,011	636,831	881,518
Specialties.	48	126,745	6,084	4,460	259,590	12,460	14,396
Other.	48	180,949	8,685	9,654	486,207	23,338	10,525
Total fish.	--	33,320,304	780,648	1,130,593	38,060,755	879,522	1,241,408
Shellfish:							
Clams and clam products: (2)							
Whole and minced .	15	1,667,532	25,013	53,420	1,428,044	21,421	50,195
Chowder and juice.	30	2,484,015	74,520	42,281	2,730,136	81,904	55,986
Specialties. . . .	48	364,394	17,491	13,617	267,164	12,824	11,186
Crabs:							
Natural.	19.5	28,367	553	1,713	28,972	565	2,199
Specialties. . . .	48	8,836	424	208	8,645	415	343
Lobster Meat and specialties. . . .	48	18,787	902	1,238	18,775	901	1,270
Oysters, specialties .	48	46,035	2,210	1,797	70,317	3,375	3,799
Shrimp:							
Natural (3). . . .	6.75	592,779	4,001	18,959	679,540	4,587	23,119
Specialties. . . .	48	24,841	1,192	1,161	19,319	927	952
Squid.	48	76,246	3,660	1,093	(4)	(4)	(4)
Other.	48	51,341	2,464	3,231	46,934	2,253	3,424
Total shellfish . .	--	5,363,173	132,430	138,718	5,297,846	129,172	152,473
Total for human consumption . . .	--	38,683,477	913,078	1,269,311	43,358,601	1,008,694	1,393,881
For bait and animal food:							
Animal food.	48	5,165,233	247,931	89,483	6,689,699	321,106	99,689
Salmon eggs.	48	2,848	137	1,520	2,823	135	808
Total for bait and animal food.	48	5,168,081	248,068	91,003	6,692,522	321,241	100,497
Grand total. . . .	--	43,851,558	1,161,146	1,360,314	50,051,123	1,329,935	1,494,378

(1) Standard case changed from 21 lb to 19.5 lb.

(2) "Cut out" or "drained" weight of can contents are given for whole or minced clams, and net contents for other clam products.

(3) Drained weight.

(4) Included in other shellfish.

Note:--Final figures will be published in Processed Fishery Products, Annual Summary, 1986 , Current Fishery Statistics No. 8387.

PROCESSED FISHERY PRODUCTS

PRODUCTION OF CANNED TUNA, 1984-86

Item	Pounds per case	1984		1985		1986	
		Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Albacore:							
Solid (1)	19.5	5,645	221,754	5,974	240,308	7,268	291,102
Chunk	19.5	854	32,642	762	29,001	786	29,253
Flakes and grated	18	86	1,601	36	653	16	440
Total	--	6,585	255,997	6,772	269,962	8,070	320,795
Lightmeat:							
Solid (1)	19.5	407	12,240	407	11,903	345	9,109
Chunk	19.5	24,012	603,411	20,772	538,904	24,199	550,978
Flakes and grated	18	42	629	(2)	(2)	49	636
Total	--	24,461	616,280	21,179	550,807	24,593	560,723
Grand total	--	31,046	872,277	27,951	820,769	32,663	881,518

(1) Standard cases changed from 21 lb to 19.5 lb beginning in 1985. (2) Included with albacore.

PRODUCTION OF CANNED SHRIMP, BY AREA, 1984-86

Area	Pounds per case	1984		1985(1)		1986	
		Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Gulf States	6.75	819	30,714	534	17,210	619	21,429
Pacific States	6.75	254	5,528	59	1,749	61	1,690
Total	6.75	1,073	36,242	593	18,959	680	23,119

(1) Revised.

PRODUCTION OF CANNED SALMON, 1984-86

Item	Pounds per case	1984		1985(1)		1986	
		Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars	Thousand standard cases	Thousand dollars
Chinook or king	48	3	241	3	275	2	239
Chum or keta	48	337	17,655	161	10,397	159	10,614
Pink	48	2,627	176,352	2,681	158,713	2,344	175,689
Red or sockeye	48	1,119	121,414	449	56,486	396	72,113
Silver or coho	48	(2) 58	4,752	17	1,763	57	6,809
Total	48	4,144	320,414	3,311	227,634	2,958	265,464

(1) Revised.

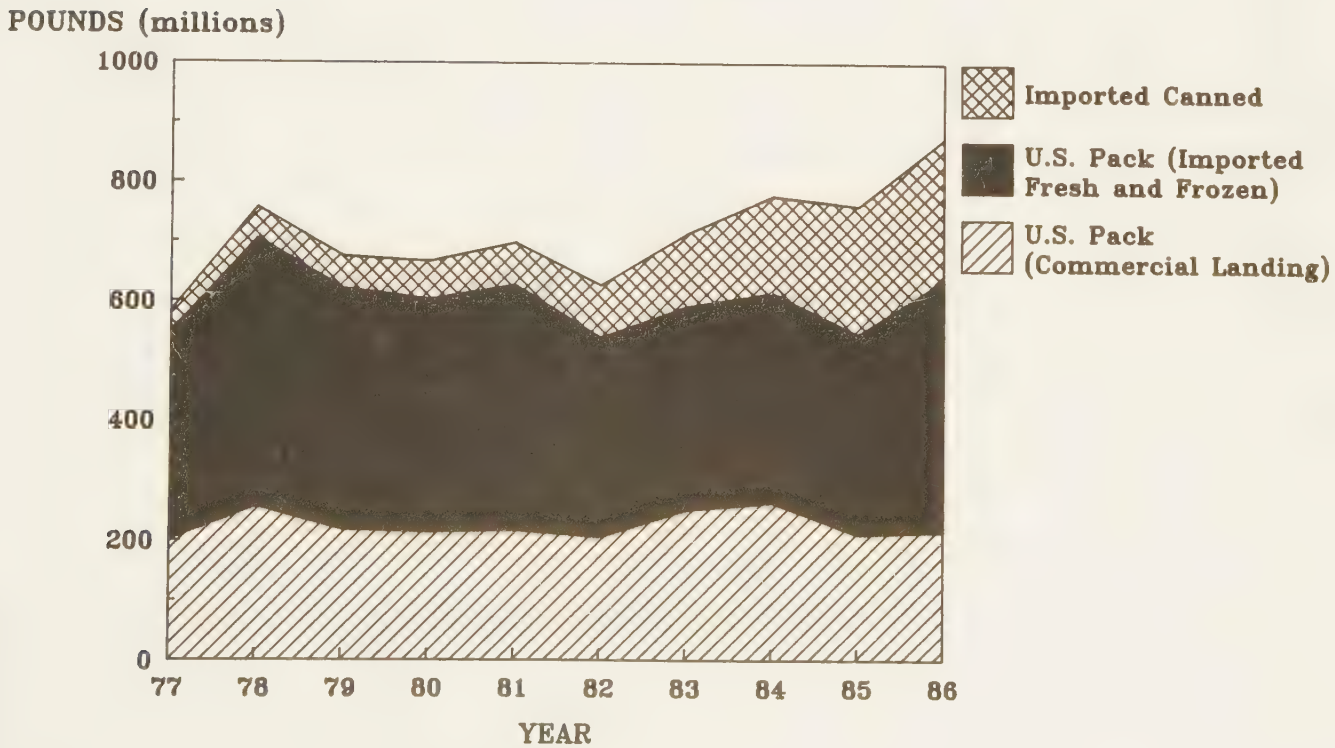
(2) Includes a small amount of steelhead.

PRODUCTION OF CANNED FISHERY PRODUCTS, 1977-86

Year	For human consumption		For animal food and bait		Total	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
1977. . . .	908,612	1,372,997	512,683	170,155	1,421,295	1,543,152
1978. . . .	1,058,095	1,719,165	539,234	164,959	1,597,329	1,884,124
1979. . . .	959,316	1,593,015	479,764	150,316	1,439,080	1,743,331
1980. . . .	1,009,280	1,781,948	506,817	145,708	1,516,097	1,927,656
1981. . . .	*1,067,415	*1,819,409	408,783	134,562	1,476,198	*1,953,971
1982. . . .	876,157	1,325,435	407,219	132,048	1,283,376	1,457,483
1983. . . .	987,329	1,393,604	403,466	140,874	1,390,795	1,534,478
1984. . . .	1,041,845	1,435,532	369,123	141,931	1,410,968	1,577,463
1985 (1). .	913,078	1,269,311	248,068	91,003	1,161,146	1,360,314
1986. . . .	1,008,694	1,393,881	321,241	100,497	1,329,935	1,494,378

(1) Revised. *Record. Records--1973 animal food and bait: 696,357,000 lb; 1976 value $197,955,000; 1973 total: 1,647,357,000 lb.

U.S. SUPPLY OF CANNED TUNA
1977 – 1986



PROCESSED FISHERY PRODUCTS

INDUSTRIAL PRODUCTS

PRODUCTION OF FISH MEAL, OIL, AND SOLUBLES, 1985 AND 1986

Product	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Dried scrap and meal:				
Fish:				
Menhaden (1)	614,998	73,414	592,504	73,092
Tuna and mackerel	68,908	7,285	74,240	7,726
Unclassified	20,662	2,428	12,534	1,596
Total	704,568	83,127	679,278	82,414
Shellfish	17,114	719	23,060	1,012
Grand total	721,682	83,846	702,338	83,426
Solubles	323,028	18,957	195,148	11,558
Body oil:				
Menhaden (1)	278,358	41,201	332,017	43,279
Unclassified	6,719	720	4,787	454
Total	285,077	41,921	336,804	43,733

(1) May include small quantities made from other species.
Note:--To convert pounds of oil to gallons divide by 7.75. The above data include production in American Samoa and Puerto Rico. Final data will be published in Processed Fishery Products, Annual Summary, 1986, Current Fisheries Statistics No. 8387

PRODUCTION OF INDUSTRIAL PRODUCTS, 1977-86

Year	Quantity			Value		
	Fish meal	Fish solubles	Marine animal oil	Fish meal, solubles, and oil	Other industrial products	Grand Total
	Thousand pounds			Thousand dollars		
1977	564,582	244,660	133,182	139,423	51,149	190,572
1978	725,820	325,086	296,287	204,211	46,714	250,925
1979	748,586	269,856	267,949	200,690	58,768	259,458
1980	723,844	267,364	312,511	206,081	*63,525	*269,606
1981	637,018	257,242	184,302	166,738	43,497	210,235
1982	746,854	305,002	347,513	192,138	41,499	233,637
1983	*763,536	317,006	*399,334	*212,606	39,785	252,391
1984	751,528	252,076	372,804	189,796	44,258	234,054
1985	721,682	323,028	285,077	144,724	37,775	182,499
1986	702,338	195,148	336,804	138,717	35,818	174,535

*Record. Record--1959 fish solubles production: 330,718 thousand pounds.
Note:--Does not include the value of imported items that may be further processed, or the value of sealskins.

U.S. COLD STORAGE HOLDINGS

FROZEN FISHERY PRODUCTS

U.S. COLD STORAGE HOLDINGS OF FISHERY PRODUCTS, 1986

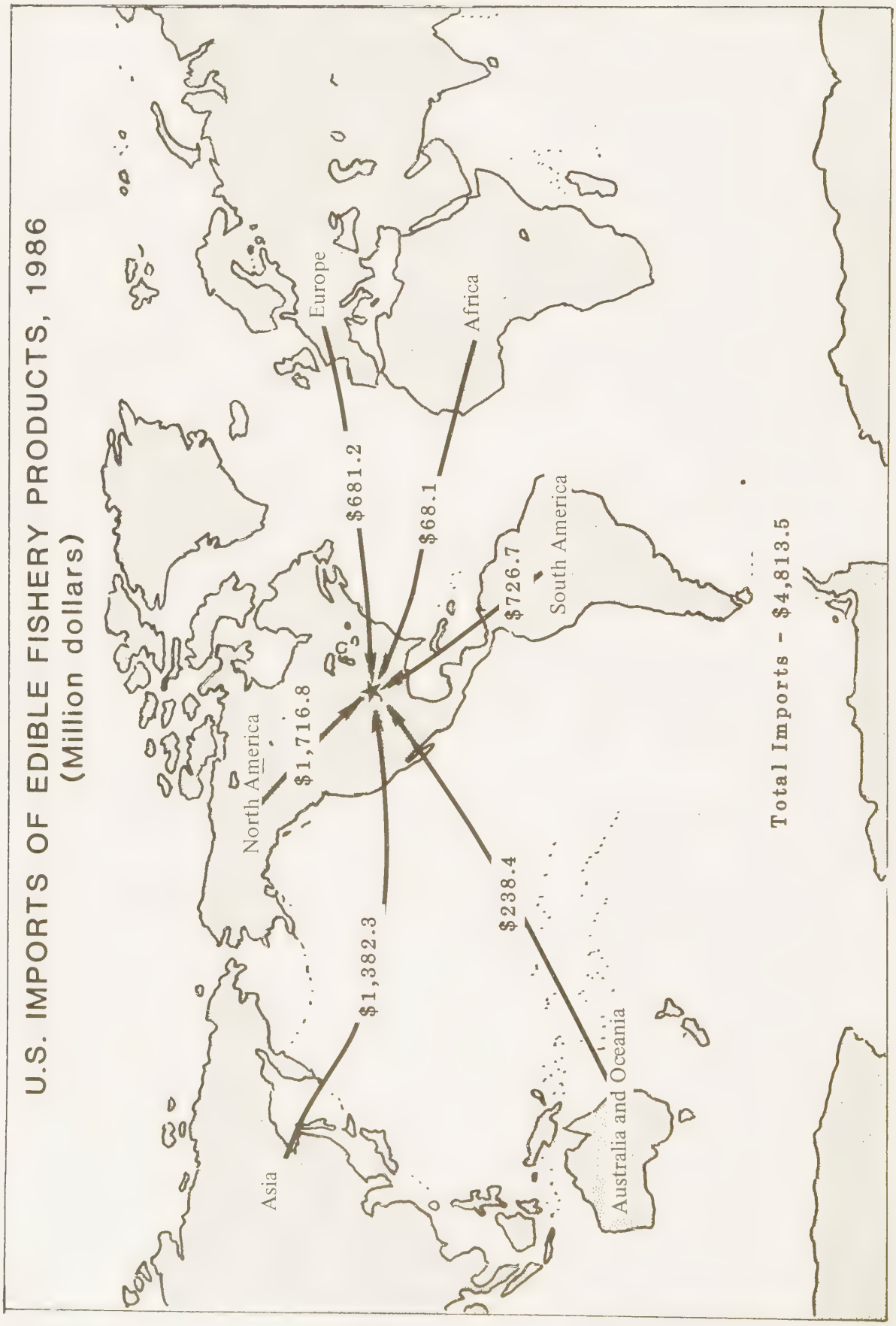
Item	January 1	March 31	June 30	September 30	December 31
	Thousand pounds				
Blocks:					
Cod	9,440	15,301	22,850	19,700	13,491
Flounder	2,609	1,553	1,852	2,431	2,989
Greenland turbot	329	207	251	667	427
Haddock	2,199	1,004	2,127	2,650	2,620
Ocean perch	520	6,327	383	596	805
Pollock (Alaska and other)	6,787	5,884	4,278	5,030	7,658
Whiting	4,869	3,703	2,400	2,829	2,505
Minced (grated) all species	2,226	1,032	5,608	8,739	12,622
Unclassified	3,638	2,348	1,080	2,844	1,927
Total blocks	32,617	37,359	40,829	45,486	45,044
Fillets and steaks:					
Cod	24,232	15,475	16,085	10,865	10,267
Flounder	10,897	6,365	6,872	10,357	9,539
Greenland turbot	3,680	1,484	742	2,424	1,562
Haddock	5,482	4,469	4,248	3,286	3,604
Halibut	1,277	616	1,302	2,012	1,454
Ocean perch	7,322	2,159	3,848	7,057	9,260
Whiting	5,278	2,892	2,156	1,866	1,980
Unclassified	19,001	14,577	13,488	13,830	16,944
Total fillets and steaks	77,169	48,037	48,741	51,697	54,610
Fish sticks and portions (cooked and uncooked, all species)	33,677	23,164	31,880	27,938	30,237
Round, dressed, etc:					
Catfish	5,035	5,088	4,352	6,849	4,555
Halibut	6,038	1,003	25,331	22,831	15,210
Rainbow trout	815	444	335	985	244
Salmon	60,165	28,029	12,369	61,002	42,197
Whiting	1,055	1,306	1,121	681	510
Unclassified fish	25,602	20,666	21,562	20,175	23,897
Surimi & analog products	(1)	5,967	7,307	7,454	11,747
Crabs:					
King	7,484	4,530	3,168	3,890	6,132
Snow	6,077	4,223	7,954	16,623	10,812
Unclassified	5,845	4,360	3,271	5,668	4,282
Lobsters (spiny and other)	6,676	5,097	4,665	4,569	5,582
Shrimp:					
Raw, headless	36,308	21,475	16,403	25,026	32,411
Breaded	3,230	2,725	2,437	6,884	6,048
Peeled	10,666	7,549	7,534	8,834	11,002
Unclassified	11,410	9,350	8,907	11,042	10,554
Total shrimp	61,614	41,099	35,281	51,786	60,015
Other shellfish	22,380	18,947	18,426	21,582	29,113
Bait and animal food	9,322	9,650	13,902	9,067	7,655
Total fish and shellfish	361,571	258,969	280,494	358,283	351,842

(1) Data not collected before January 31, 1986.

Note:--Holdings of frozen fishery products include domestic and imported frozen fish and shellfish.

Source:--Frozen Fishery Products, Annual Summary, 1986, Current Fishery Statistics No. 8378 will provide additional information.

U.S. IMPORTS


U.S. IMPORTS OF EDIBLE FISHERY PRODUCTS, 1986
(Million dollars)
Europe
$681.2
Africa
$68.1
South America
$726.7
North America
$1,716.8
Asia
$1,382.3
Australia and Oceania
$238.4
Total Imports - $4,813.5

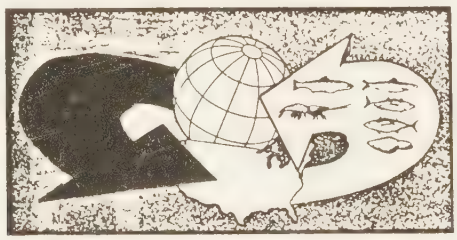
FOREIGN TRADE

IMPORTS

EDIBLE AND NONEDIBLE FISHERY PRODUCTS IMPORTS, 1977-86

Year	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars		
1977	2,176,189	2,078,171	555,435	2,633,606
1978	2,410,673	2,256,314	829,637	3,085,951
1979	2,358,920	2,671,860	1,136,931	3,808,791
1980	2,144,928	2,686,721	961,731	3,648,452
1981	2,272,474	3,034,206	1,171,805	4,206,011
1982	2,225,048	3,202,408	1,321,170	4,523,578
1983	2,386,771	3,626,704	1,502,668	5,129,372
1984	2,454,287	3,742,333	2,141,060	5,883,393
1985	2,754,018	4,064,334	2,614,252	6,678,586
1986	*2,978,905	*4,813,488	*2,812,805	*7,626,293

*Record. Source:--U.S. Department of Commerce, Bureau of the Census.



FISHERY PRODUCTS IMPORTS: VALUE, DUTIES COLLECTED, AND AD VALOREM EQUIVALENT, 1977-86

Year	Value		Duties collected		Average ad valorem equivalent	
	Fishery imports	All imports	Fishery imports	All imports	Fishery imports	All imports
	Thousand dollars				Percent	
1977	2,633,606	147,075,300	58,119	5,484,800	2.2	3.7
1978	3,085,951	172,952,200	88,930	7,161,500	2.9	4.1
1979	3,808,791	205,922,662	116,617	7,202,174	3.1	3.5
1980	3,648,452	239,943,468	87,288	7,535,421	2.4	3.1
1981	4,206,011	260,981,800	102,064	8,893,200	2.4	3.4
1982	4,523,578	243,951,900	111,952	8,687,452	2.5	3.6
1983	5,129,372	256,679,524	116,503	9,430,004	2.3	3.7
1984	5,883,393	322,989,519	145,689	12,042,152	2.5	3.7
1985	6,678,586	343,553,150	191,421	13,066,970	2.9	3.8
1986	7,626,293	368,656,594	187,791	13,312,112	2.5	3.6

Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS

FISHERY PRODUCTS IMPORTS, BY PRINCIPAL ITEMS, 1985 AND 1986

Item	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Edible fishery products:				
Fresh and frozen:				
Whole or eviscerated				
Cod, cusk, haddock and flounder	100,431	45,400	103,080	58,534
Halibut	12,840	22,056	11,257	25,162
Salmon	27,038	75,598	40,549	100,669
Tuna:				
Albacore	176,668	142,304	209,827	154,448
Other (1)	302,113	124,031	353,970	144,399
Other	163,675	112,779	183,741	154,713
Fillets and steaks:				
Flounder	57,964	89,675	65,452	112,096
Groundfish	305,690	380,197	287,099	410,718
Other	173,071	243,989	185,981	303,977
Blocks and slabs	334,060	275,064	363,897	379,887
Shrimp	342,818	1,120,749	384,349	1,404,931
Crabmeat	12,934	48,269	14,509	71,742
Lobster:				
American (includes fresh-cooked meat)	33,933	124,682	37,358	148,575
Spiny	43,496	340,221	41,961	316,340
Scallops (meats)	42,035	147,070	47,916	192,558
Analog products with shellfish	33,654	48,160	34,312	58,487
Other fish and shellfish	100,253	169,529	92,716	171,269
Canned:				
Herring, not in oil	5,582	8,275	5,707	9,390
Sardines:				
In oil	23,009	26,996	22,949	28,520
Not in oil	34,213	21,990	30,315	21,049
Tuna:				
In oil	303	560	301	707
Not in oil	213,645	208,578	236,320	227,919
Balls, cakes, and puddings:				
Analog products without shellfish	(2)	(2)	5,384	8,037
Other	19,321	24,396	12,919	18,997
Abalone	2,816	14,722	2,579	15,460
Clams	9,824	8,804	13,885	9,864
Crabmeat	7,584	21,947	8,778	23,975
Lobsters:				
American	869	6,017	352	2,971
Spiny	56	364	37	194
Oysters	28,928	30,176	32,050	32,311
Shrimp	17,088	32,163	15,757	29,406
Other fish and shellfish	51,122	60,785	51,502	71,649
Cured:				
Pickled or salted:				
Cod, haddock, hake, et al	34,717	41,247	36,915	49,477
Herring	19,727	8,641	21,787	9,269
Other	10,752	21,189	9,354	21,187
Other fish and shellfish	11,789	17,711	14,040	24,601
Total edible fishery products	2,754,018	4,064,334	2,978,905	4,813,488
Nonedible fishery products:				
Meal and scrap	510,654	61,712	370,548	47,247
Fish oils	20,570	5,200	22,859	9,258
Other	-	2,547,340	-	2,756,300
Total nonedible fishery products	-	2,614,252	-	2,812,805
Grand total	-	6,678,586	-	7,626,293

(1) Includes loins and discs.

(2) Not reported separately prior to 1986.

Note:--Data include imports into the United States and Puerto Rico and include landings of tuna by foreign vessels at American Samoa. Statistics on imports are the weight of individual products as exported, i.e., fillets, steaks, whole, headed, etc.

Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS

EDIBLE AND NONEDIBLE FSHERY PRODUCTS IMPORTS, 1986

Continent and country	Edible		Nonedible	Total
	Thousand pounds	- - - - - - - - Thousand dollars - - - - -		
North America:				
Canada	716,748	1,020,046	78,750	1,098,796
Mexico	100,168	372,356	37,076	409,432
Panama	77,911	122,912	4,159	127,071
Honduras	11,220	59,451	7	59,458
Costa Rica	16,096	38,802	1,974	40,776
Dominican Republic	3,035	5,293	25,000	30,293
El Salvador	8,966	23,525	356	23,881
Other	34,343	74,450	16,186	90,636
Total	968,487	1,716,835	163,508	1,880,343
South America:				
Ecuador	101,930	307,629	5,407	313,036
Brazil	63,992	123,813	11,676	135,489
Chile	33,278	49,398	36,619	86,017
Venezuela	72,381	81,452	1,030	82,482
Peru	22,220	39,585	15,445	55,030
Other	101,979	124,873	16,622	141,495
Total	395,780	726,750	86,799	813,549
Europe:				
European Economic Community:				
Italy	2,268	3,357	1,049,169	1,052,526
France	63,698	31,474	157,780	189,254
United Kingdom	15,298	38,400	92,122	130,522
Denmark	74,031	104,618	16,717	121,335
Spain	37,119	48,965	46,202	95,167
Fed. Republic of Germany	3,128	4,624	70,785	75,409
Other	30,045	53,134	31,636	84,770
Total	225,587	284,572	1,464,411	1,748,983
Other:				
Iceland	137,370	209,943	897	210,840
Norway	76,039	165,715	7,406	173,121
Switzerland	536	1,282	133,977	135,259
Yugoslavia	4,077	2,140	17,490	19,630
Other	23,041	17,536	15,813	33,349
Total	241,063	396,616	175,583	572,199
Asia:				
Japan	191,094	325,849	240,444	566,293
Thailand	217,251	241,041	134,866	375,907
Taiwan	178,466	256,661	70,624	327,285
Hong Kong	22,023	21,728	244,992	266,720
Republic of Korea	127,153	144,957	20,239	165,196
Other	270,677	392,044	194,592	586,636
Total	1,006,664	1,382,280	905,757	2,288,037
Australia and Oceania:				
New Zealand	45,434	131,381	1,530	132,911
Australia	12,282	102,329	4,914	107,243
French Pacific Islands	22	160	3,284	3,444
British Pacific Islands	4,009	3,338	17	3,355
Other Pacific Islands	213	485	125	610
Other	465	678	63	741
Total	62,425	238,371	9,933	248,304
Africa:				
Republic of South Africa	17,118	35,858	1,034	36,892
Ghana	44,367	18,153	6	18,159
Morocco	1,533	2,253	3,308	5,561
French Indian Ocean	5,672	3,479	-	3,479
Other	10,209	8,321	2,466	10,787
Total	78,899	68,064	6,814	74,878
Grand total	2,978,905	4,813,488	2,812,805	7,626,293

Note:--Statistics on imports are the weights of individual products as exported, i.e., fillets, steaks, whole, headed, etc. Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

IMPORTS

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY SPECIES AND TYPE, 1985 AND 1986

Species and type	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Regular blocks and slabs:				
Cod	164,458	162,748	172,675	215,947
Flatfish:				
Turbot	2,932	2,089	1,779	1,805
Other	8,301	9,484	6,438	7,385
Haddock	16,297	17,503	24,491	31,353
Ocean Perch, Atlantic	1,407	1,155	1,872	1,957
Pollock	79,401	43,899	69,725	44,266
Whiting	19,015	9,827	16,080	10,094
Other	8,319	9,769	15,619	23,159
Total	300,130	256,474	308,679	335,966
Minced blocks and slabs: (1).	33,930	18,590	55,218	43,921
Grand total	334,060	275,064	363,897	379,887

(1) Most of the shipments were from Canada, Denmark and Japan in 1986.
Source:--U.S. Department of Commerce, Bureau of the Census.

REGULAR AND MINCED FISH BLOCKS AND SLABS IMPORTS, BY COUNTRY OF ORIGIN, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Canada	105,004	95,235	124,557	137,897
Denmark	53,152	49,058	47,585	57,126
Iceland	55,585	50,582	42,450	50,664
Republic of Korea	49,539	30,661	49,899	37,139
Japan	13,065	11,635	23,805	27,476
Norway	10,232	8,587	21,930	25,688
Poland	18,006	10,302	18,758	11,045
New Zealand	518	721	4,600	11,037
Other	28,959	18,283	30,313	21,815
Total	334,060	275,064	363,897	379,887

Source:--U.S. Department of Commerce, Bureau of the Census.

GROUNDFISH FILLET AND STEAK IMPORTS, BY SPECIES, 1985 AND 1986 (1)

Species	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Cod	186,914	243,594	179,912	266,967
Haddock (2)	65,705	79,750	58,152	78,786
Ocean Perch, Atlantic	53,071	56,853	49,035	64,965
Total	305,690	380,197	287,099	410,718

(1) Does not include data on fish blocks and slabs.
(2) Includes some quantities of cusk, hake, and pollock fillets.
Note:--Import and Exports of Fishery Products Annual Summary, 1986, Current Fishery Statistics No. 8386 will provide additional information.
Source:--U.S. Department of Commerce, Bureau of the Census.

IMPORTS

GROUNDFISH FILLETS AND STEAKS, QUOTA AND IMPORTS 1977-1986 (1)

Year	Quota (2)	Over-quota (3)	Total
		Thousand pounds	
1977	35,437	181,985	217,422
1978	39,025	194,081	233,106
1979	42,744	210,213	252,957
1980	45,241	175,713	220,954
1981	47,264	209,900	257,164
1982	48,098	247,095	295,193
1983	49,489	248,681	298,170
1984	56,098	251,754	307,852
1985	56,822	248,868	305,690
1986	58,653	228,446	287,099

(1) Includes cod, cusk, haddock, hake, Atlantic ocean perch and Atlantic pollock.
(2) Dutiable at 1.875 cents per lb. Quota was filled in all years.
(3) Dutiable at 2.5 cents per lb, prior to 1980; 1980, 2.42 cents; 1981, 2.34 cents; 1982, 2.27 cents; 1983, 2.19 cents; 1984, 2.04 cents; 1985 and 1986, 1.96 cents per pound.

Source:--Data on quota from U.S. Department of the Treasury, Bureau of Customs. Imports over-quota calculated from imports reported by U.S. Department of Commerce, Bureau of the Census.

CANNED TUNA NOT IN OIL, QUOTA AND IMPORTS, 1977-86

Year	Quota (1)	Imports	
		Under quota (2)	Over quota (3)
		Thousand pounds	
1977	111,246	33,913	-
1978	101,407	50,031	-
1979	125,813	82,202	-
1980	109,074	109,074	5,064
1981	104,355	76,683	-
1982	109,742	92,759	-
1983	91,904	91,904	28,304
1984	95,587	95,587	68,328
1985	97,496	97,496	116,854
1986	81,092	81,092	153,057

(1) Imports have been subject to tariff quotas since April 14, 1956, and are based on 20 percent of the previous year's domestic pack, excluding the pack in American Samoa.

(2) Dutiable at 6 percent ad valorem.

(3) Dutiable at 12.5 percent ad valorem.

Note:--Data in this table will not agree with tuna import data released by the U.S. Department of Commerce, Bureau of the Census. Any tuna entered for consumption or withdrawn from a warehouse for consumption during the calandar year, except for receipts from insular possessions of the U.S., is subject to this quota.

Source:--U.S. Department of the Treasury, Bureau of Customs.

FOREIGN TRADE

IMPORTS

SHRIMP IMPORTS BY COUNTRY OF ORIGIN, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
North America:				
Mexico	67,520	296,886	74,413	331,436
Panama	19,662	67,847	21,793	77,769
Honduras	5,190	17,958	5,531	24,530
El Salvador	6,202	17,336	7,615	19,960
Costa Rica	7,408	18,615	6,930	19,408
Canada	4,280	11,564	3,540	11,157
Guatemala	3,792	13,009	2,868	9,962
Trinidad and Tobago	6	20	179	632
Belize	90	466	88	374
Cayman Islands	139	422	74	288
Haiti	81	243	25	140
Other	1,087	4,019	54	256
Total	115,457	448,385	123,110	495,912
South America:				
Ecuador	43,920	166,087	62,021	277,828
Brazil	25,312	67,853	19,932	66,208
Venezuela	6,681	27,323	9,027	38,916
Guyana	2,421	9,124	4,984	21,670
Colombia	3,312	13,614	4,355	18,148
French Guiana	2,106	10,140	3,402	17,001
Peru	4,597	17,265	3,731	15,902
Chile	248	792	783	2,690
Argentina	4,295	14,007	668	2,086
Other	1,367	3,939	429	1,670
Total	94,259	330,144	109,332	462,119
Europe:				
European Economic Community:				
United Kingdom	2,005	5,931	3,691	11,623
Spain	463	2,256	454	1,784
Denmark	850	1,901	479	1,674
Netherlands	234	618	149	518
France	1,300	6,305	161	485
Other	416	1,328	218	587
Total	5,268	18,339	5,152	16,671
Other:				
Norway	15,865	35,098	6,794	24,707
Iceland	4,669	9,761	1,579	5,429
Switzerland	-	-	222	709
Bulgaria	-	-	99	351
USSR	441	1,746	552	267
Other	858	1,487	38	228
Total	21,833	48,092	9,284	31,691
Asia:				
Taiwan	29,579	75,653	34,584	114,141
Thailand	24,479	59,894	24,115	59,632
China	6,931	21,291	20,661	62,534
India	23,965	42,670	24,442	46,792
Pakistan	11,318	20,290	14,309	29,510
Philippines	4,732	20,155	4,614	20,172
Bangladesh	4,260	13,481	6,064	19,509
Singapore	3,315	8,914	5,755	15,920
Malaysia	2,447	5,932	4,082	9,449
Indonesia	2,003	6,132	2,291	8,206
Macao	1,254	4,018	2,775	7,615
Japan	1,516	5,302	1,055	5,708
Other	5,239	14,758	5,858	16,707
Total	121,038	298,490	150,605	415,895
Australia and Oceania	1,210	6,274	1,874	9,664
Africa	841	3,188	749	2,385
Grand total	359,906	1,152,912	400,106	1,434,337

Note:--Statistics on imports are the weights of the individual products as exported, i.e., raw headless, peeled, etc. Source:--U.S. Department of Commerce, Bureau of the Census.

SHRIMP IMPORTS, BY TYPE OF PRODUCT, 1985 AND 1986

Type of product	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Shell-on (heads off)	232,642	866,566	262,044	1,080,127
Peeled:				
Canned	17,088	32,163	15,757	29,406
Not breaded:				
Raw	77,532	173,298	91,843	221,263
Other	32,046	79,348	30,229	102,709
Breaded	598	1,537	233	832
Total	359,906	1,152,912	400,106	1,434,337

Source:--U.S. Department of Commerce, Bureau of the Census.

CANNED TUNA NOT IN OIL, BY COUNTRY OF ORIGIN, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Thailand	122,666	111,851	152,297	139,561
Taiwan	23,471	29,800	28,579	34,483
Philippines	30,795	25,929	27,982	23,124
Japan	23,696	28,135	10,558	14,755
Venezuela	923	851	7,328	6,389
Malaysia	3,878	4,498	2,401	3,160
Ecuador	5,175	4,676	2,886	2,603
Other	3,041	2,838	4,289	3,844
Total	213,645	208,578	236,320	227,919

Source:--U.S. Department of Commerce, Bureau of the Census.

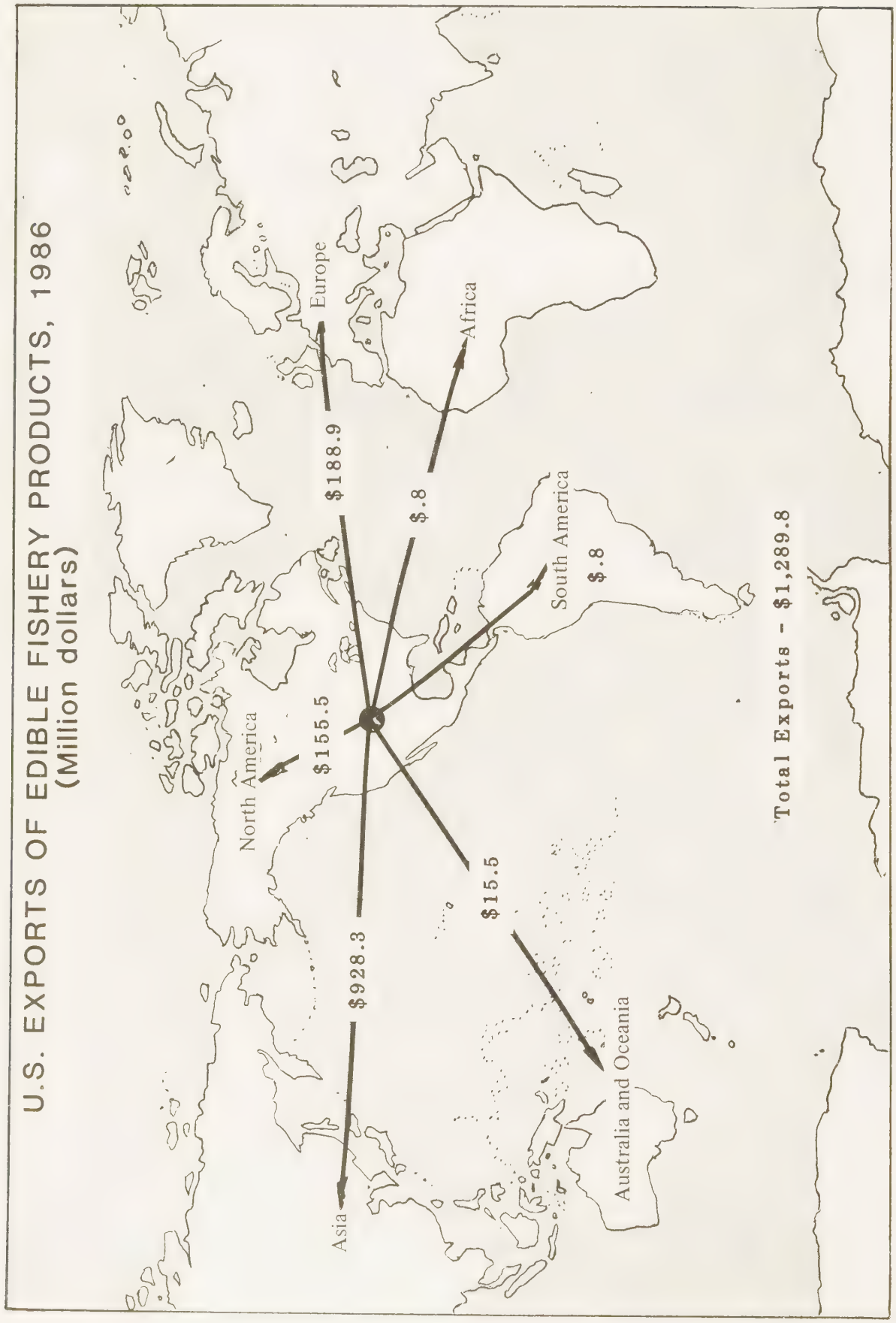
FISH MEAL AND SCRAP IMPORTS, BY COUNTRY OF ORIGIN, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Chile	290,250	37,991	232,840	31,250
Canada	50,730	6,556	36,018	5,476
Ecuador	103,120	11,455	49,752	5,245
Peru	-	-	27,442	3,124
Panama	64,710	5,425	20,536	1,575
Spain	438	41	864	124
Japan	-	-	990	94
Other	1,406	244	2,106	356
Total	510,654	61,712	370,548	47,247

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

U.S. EXPORTS



EXPORTS

DOMESTIC FISHERY PRODUCTS EXPORTS, BY PRINCIPAL ITEMS, 1985 AND 1986

Item	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Edible fishery products:				
Eels, live	1,581	1,968	1,856	2,259
Fresh and frozen:				
Whole or eviscerated:				
Butterfish	(1)	(1)	2,205	1,798
Eels	518	513	1,324	515
Halibut	(1)	(1)	11,004	18,233
Herring	95,663	70,561	84,977	66,177
Mackerel	459	208	704	278
Mullet	2,456	925	1,566	1,513
Pollock	1,386	1,201	3,031	2,950
Sablefish	15,923	22,127	26,643	36,134
Salmon	288,688	462,194	290,458	546,231
Unclassified	57,020	59,007	59,980	68,641
Fillets, steaks, and portions:				
Cod	(1)	(1)	9,546	12,669
Halibut	(1)	(1)	1,816	2,996
Herring	1,880	1,722	5,455	4,045
Salmon	956	2,037	3,086	6,064
Unclassified	17,492	24,598	21,176	32,112
Fish sticks and portions	2,085	2,643	2,414	3,210
Clams	1,001	1,662	1,319	2,277
Crabs:				
Dungeness	(1)	(1)	503	2,043
King	2,316	10,479	3,966	24,487
Snow	22,271	37,164	31,420	73,571
Unclassified	3,959	9,632	5,405	15,706
Lobsters	1,501	5,296	2,602	8,990
Scallops	605	2,453	816	3,646
Sea urchins	656	5,327	1,271	11,451
Shrimp	15,007	48,157	20,043	69,119
Squid	7,003	4,746	14,374	11,811
Other fish and shellfish	3,814	8,766	6,530	14,663
Canned:				
Salmon	48,240	83,059	59,434	101,235
Sardines	529	424	271	321
Abalone	139	851	999	9,658
King crab	141	651	50	117
Shrimp	1,564	4,261	1,964	5,519
Squid	1,838	817	7,815	3,116
Other fish and shellfish	6,079	6,410	9,057	12,283
Cured:				
Cod	(1)	(1)	1,799	1,617
Salmon	(1)	(1)	862	2,445
Roe:				
Herring	15,238	44,559	10,583	19,148
Salmon	20,022	66,746	19,225	72,048
Sea urchin	132	646	284	1,470
Other	1,614	6,791	4,032	10,896
Other fish and shellfish	7,771	10,786	2,613	5,267
Other	599	881	548	1,078
Total edible fishery products	648,146	1,010,268	735,026	1,289,807
Nonedible fishery products:				
Meal and scrap	69,166	6,960	77,020	10,571
Fish oils	279,080	36,758	192,214	20,828
Seal furs	(2)	1,050	(2)	548
Other	-	29,078	-	34,342
Total nonedible fishery products	-	73,846	-	66,289
Grand total	-	1,084,114	-	1,356,096

(1) Not reported separately prior to 1986. (2) Number of seal furs was 13,029 in 1985 and 10,837 in 1986. Note--Does not include U.S.-flag vessel catches transferred onto foreign vessels in the U.S. EEZ joint venture operations (see page 19).

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1986

Continent and Country	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars	Thousand dollars	Thousand dollars
North America:				
Canada	67,268	116,530	4,438	120,968
Mexico	8,495	25,920	1,995	27,915
Bermuda	951	2,942	3	2,945
Netherlands Antilles	1,655	2,230	135	2,365
Dominican Republic	1,511	1,501	365	1,866
Trinidad and Tobago	931	1,027	608	1,635
Honduras	1,147	1,393	117	1,510
Panama	974	1,292	101	1,393
Bahamas	407	574	88	662
Jamaica	511	338	176	514
British Virgin Islands	215	433	71	504
Haiti	313	327	255	353
Guatemala	21	16	255	271
French West Indies	202	222	16	238
Cayman Islands	144	233	-	233
Belize	221	167	-	167
Barbados	117	161	1	162
Turks and Caicos Islands	127	135	-	135
El Salvador	17	35	27	62
Miquelon Islands	27	24	-	24
Costa Rica	7	6	16	22
Total	85,261	155,506	8,438	163,944
South America:				
Brazil	5	11	1,184	1,195
Venezuela	23	77	978	1,055
Ecuador	219	518	254	772
Columbia	70	108	390	498
Chile	4	22	342	364
Argentina	1	2	282	284
Peru	-	-	231	231
Uruguay	-	-	66	66
Guyana	18	2	33	35
Paraguay	11	23	-	23
Total	351	763	3,760	4,523
Europe:				
European Economic Community:				
United Kingdom	45,045	75,643	2,161	77,804
France	30,175	52,259	183	52,442
Netherlands	7,390	11,444	14,753	26,197
Belgium and Luxembourg	4,955	8,895	1,782	10,677
Federal Republic of Germany	4,779	7,695	718	8,413
Spain	4,772	4,733	772	5,505
Denmark	3,393	4,737	576	5,313
Italy	3,324	4,187	451	4,638
Greece	6,172	2,537	40	2,577
Portugal	2,315	794	-	794
Ireland	385	572	-	572
Total	112,705	173,496	21,436	194,932
Other:				
Sweden	8,256	11,308	420	11,728
Norway	2,565	1,875	1,424	3,299
Switzerland	1,066	2,121	16	2,137

See footnotes at end of table.

(Continued)

DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1986 - Continued

Continent and Country	Edible		Nonedible	Total
	Thousand pounds	Thousand dollars		
Other - continued:				
Iceland	62	52	78	130
Finland	75	87	17	104
Austria	(1)	1	2	3
Yugoslavia	-	-	2	2
Total	12,024	15,444	1,959	17,403
Asia:				
Japan	461,883	862,906	13,858	876,764
Republic of Korea	31,409	31,956	772	32,728
Taiwan	3,168	10,624	2,153	12,777
Hong Kong	2,118	9,392	2,210	11,602
Singapore	1,978	4,062	247	4,309
China	4,390	3,626	-	3,626
Israel	1,611	2,418	111	2,529
Thailand	1,425	1,807	195	2,002
India	-	-	1,855	1,855
Philippines	1,242	635	211	846
Saudi Arabia	410	571	17	588
Malaysia	51	95	68	163
Indonesia	20	47	60	107
Kuwait	27	87	-	87
Nepal	-	-	49	49
United Arab Emerates	17	29	-	29
Oman	8	15	-	15
Qatar	1	13	-	13
Jordan	4	12	-	12
Bangladesh	-	-	6	6
Bahrain	1	2	-	2
Brunei		1	1	- 1
Total	509,764	928,298	21,812	950,110
Australia and Oceania:				
Australia	10,670	13,915	553	14,468
French Pacific Islands	552	865	47	912
Other Pacific Islands	1,632	394	23	417
New Zealand	62	138	109	247
Pacific Islands, (Trust Territory)	133	128	-	128
Papua New Guinea	44	13	-	13
Western Samoa	.1	2	-	2
Total	13,094	15,455	732	16,187

See footnote at end of table.

(Continued)

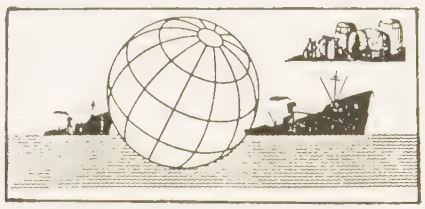
EXPORTS

DOMESTIC FISHERY PRODUCTS EXPORTS, BY CONTINENT AND COUNTRY OF DESTINATION, 1986 - Continued

Continent and Country	Edible		Nonedible	Total
	Thousand pounds	- - - - - - Thousand dollars - - - - - -		
Africa:				
Egypt	1,598	550	6,872	7,422
Republic of South Africa	209	260	1,207	1,467
Ivory Coast	-	-	39	39
Nigeria	-	-	15	15
Angola	7	14	-	14
Zambia	-	-	12	12
Guinea	6	8	-	8
Western Africa	5	7	-	7
Namibia	2	6	-	6
Kenya	-	-	4	4
Liberia	-	-	2	2
French Indian Ocean Area	-	-	1	1
Total	1,827	845	8,152	8,997
Grand Total	735,026	1,289,807	66,289	1,356,096

(1) Less than 500 lb.

Source:--U.S. Department of Commerce, Bureau of the Census.



DOMESTIC FISHERY PRODUCTS EXPORTS, 1977-86

Year	Edible		Nonedible	Total
	Thousand pounds	- - - - - - - Thousand dollars - - - - - - -		
1977	331,059	473,375	47,121	520,496
1978	448,312	831,654	73,880	905,534
1979	554,294	1,022,335	62,162	1,084,497
1980	573,896	904,363	101,791	1,006,154
1981	669,272	1,072,765	84,230	1,156,995
1982	657,246	998,873	60,011	1,058,884
1983	601,913	907,688	*113,804	1,021,492
1984	574,124	842,349	106,490	948,839
1985	648,146	1,010,268	73,846	1,084,114
1986	*735,026	*1,289,807	66,289	*1,356,096

*Record. Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS

DOMESTIC AND FOREIGN SHRIMP PRODUCTS EXPORTS, 1985 AND 1986

Item	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Fresh and frozen:				
Domestic	15,007	48,157	20,043	69,119
Foreign	5,735	22,604	2,548	9,532
Total	20,742	70,761	22,591	78,651
Canned:				
Domestic	1,564	4,261	1,964	5,519
Foreign	134	304	113	265
Total	1,698	4,565	2,077	5,784
Total:				
Domestic	16,571	52,418	22,007	74,638
Foreign	5,869	22,908	2,661	9,797
Total	22,440	75,326	24,668	84,435

(1) Less than 500 lb.
Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC FRESH AND FROZEN SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Mexico	5,966	15,685	7,310	24,180
Canada	6,791	23,556	6,796	23,123
Japan	1,706	6,757	4,605	16,978
Bermuda	68	341	151	957
Netherlands	91	345	87	448
Ecuador	2	60	140	320
Belgium and Luxemourg	(1)	2	113	302
United Kingdom	71	246	64	272
Norway	-	-	49	213
Other	312	1,165	728	2,326
Total	15,007	48,157	20,043	69,119

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC CANNED SHRIMP EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Canada	1,256	3,486	1,302	3,654
Taiwan	47	148	192	584
Switzerland	95	245	125	299
Japan	14	40	45	181
Mexico	-	-	76	180
Belgium and Luxembourg	54	139	35	98
Ecuador	-	-	35	93
Bermuda	4	5	29	83
New Zealand	10	37	36	65
Other	84	161	89	282
Total	1,564	4,261	1,964	5,519

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS

DOMESTIC FRESH AND FROZEN SALMON EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	227,313	384,924	216,964	445,574
France	14,543	24,249	23,298	38,814
Canada	25,690	21,545	16,873	20,787
United Kingdom	4,186	6,242	6,327	8,515
Republic of Korea	1,479	1,178	10,304	7,690
Sweden	4,193	5,526	6,493	7,355
Belgium and Luxembourg	1,618	3,399	2,384	5,196
Denmark	3,907	5,687	3,082	4,118
Federal Republic of Germany	3,049	4,657	2,264	3,370
Netherlands	634	1,186	592	1,319
Switzerland	426	690	553	1,012
Italy	353	820	385	870
Other	1,297	2,091	939	1,611
Total	288,688	462,194	290,458	546,231

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC FRESH AND FROZEN SALMON EXPORTS, FILLETS, STEAKS OR PORTIONS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
France	201	308	1,297	2,627
Canada	182	446	825	1,543
Japan	383	850	637	1,343
Sweden	50	115	142	145
Belgium and Luxembourg	34	79	53	131
United Kingdom	30	44	76	104
Federal Republic of Germany	21	47	29	65
Italy	1	4	5	28
Israel	-	-	6	22
Other	54	144	16	56
Total	956	2,037	3,086	6,064

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC CANNED SALMON EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
United Kingdom	19,368	36,599	35,362	62,525
Canada	11,788	18,875	6,569	13,949
Australia	10,391	17,978	8,805	12,745
Netherlands	3,387	4,470	5,016	6,913
Belgium and Luxembourg	1,268	2,022	1,676	2,277
France	543	647	466	586
Japan	88	215	293	528
Ireland	429	629	257	352
Panama	104	164	204	272
Other	874	1,460	786	1,088
Total	48,240	83,059	59,434	101,235

Source:--U.S. Department of Commerce, Bureau of the Census.

EXPORTS

DOMESTIC FROZEN KING CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	1,576	6,665	2,797	19,277
Canada	678	3,493	1,098	4,718
Singapore	4	24	8	68
United Kingdom	26	124	14	59
Bermuda	10	48	9	57
Switzerland	-	-	5	49
Other	22	125	35	259
Total	2,316	10,479	3,966	24,487

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC FROZEN SNOW CRAB EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	19,606	33,334	24,182	62,318
Republic of Korea	2,001	2,276	6,172	9,176
Canada	614	1,362	1,000	1,806
Singapore	10	60	12	53
United Kingdom	-	-	19	52
Hong Kong	11	43	7	46
Other	29	89	28	120
Total	22,271	37,164	31,420	73,571

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC FRESH AND FROZEN HERRING EXPORTS, WHOLE OR EVISCERATED, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Japan	74,491	54,692	63,814	46,830
Republic of Korea	12,797	10,623	11,471	11,806
Canada	4,025	2,423	5,520	3,962
China	2,485	1,840	3,208	2,558
Singapore	-	-	952	1,017
Other	1,865	983	12	4
Total	95,663	70,561	84,977	66,177

Source:--U.S. Department of Commerce, Bureau of the Census.

FOREIGN TRADE

EXPORTS

DOMESTIC FISH AND MARINE ANIMAL OIL EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Netherlands	196,731	25,512	126,553	13,531
Belgium and Luxembourg	18,327	2,136	14,348	1,718
United Kingdom	36,224	4,894	13,659	1,494
Norway	45	102	13,565	1,399
Republic of South Africa	4,408	526	14,221	1,181
Spain	-	-	5,896	603
Sweden	22,513	2,947	2,249	339
Canada	447	242	466	258
Other	385	399	1,257	305
Total	279,080	36,758	192,214	20,828

Source:--U.S. Department of Commerce, Bureau of the Census.

DOMESTIC FISH MEAL EXPORTS, BY COUNTRY OF DESTINATION, 1985 AND 1986

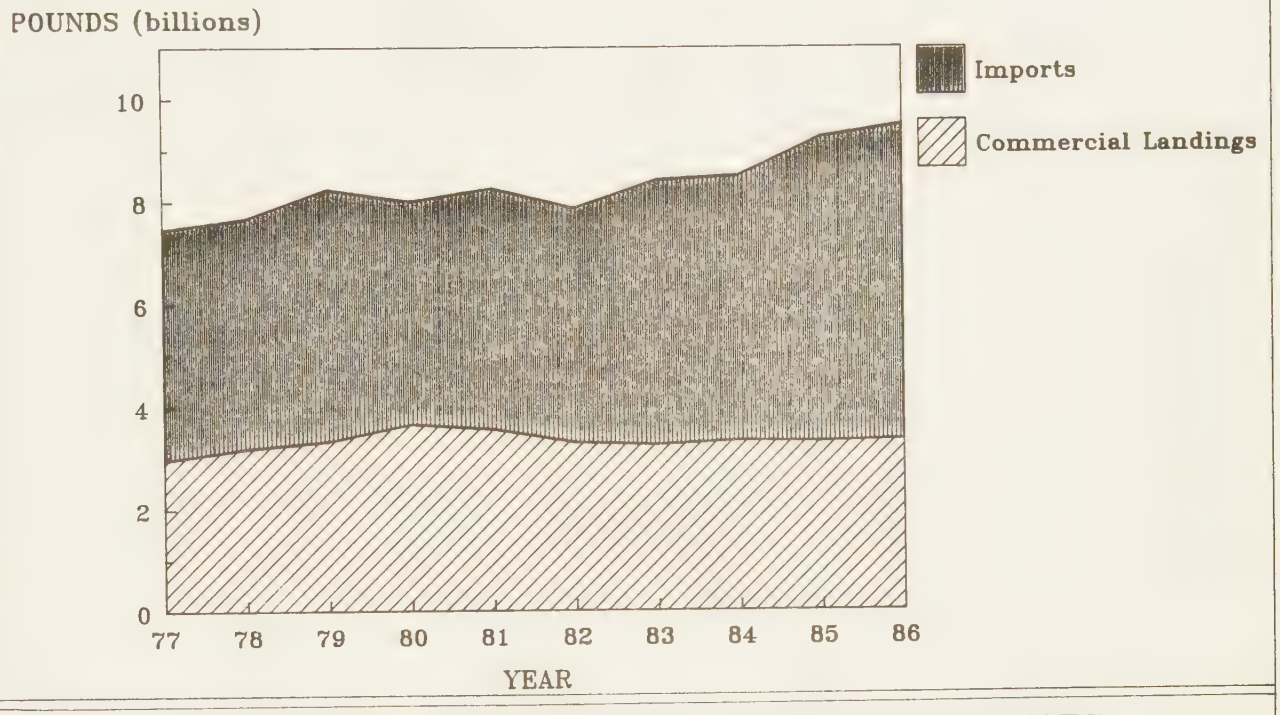
Country	1985		1986	
	Thousand pounds	Thousand dollars	Thousand pounds	Thousand dollars
Egypt	13,692	1,703	42,590	6,872
Taiwan	4,508	460	5,096	749
Trindad and Tobago	656	82	3,982	587
Canada	6,880	447	7,568	568
Japan	1,770	361	3,218	469
Federal Republic of Germany	33,440	2,970	3,392	202
Dominican Republic	1,204	139	1,780	194
Jamaica	546	63	1,342	168
Other	6,470	735	8,052	762
Total	69,166	6,960	77,020	10,571

Source:--U.S. Department of Commerce, Bureau of the Census.

U.S. SUPPLY OF EDIBLE FISHERY PRODUCTS

(ROUND WEIGHT)

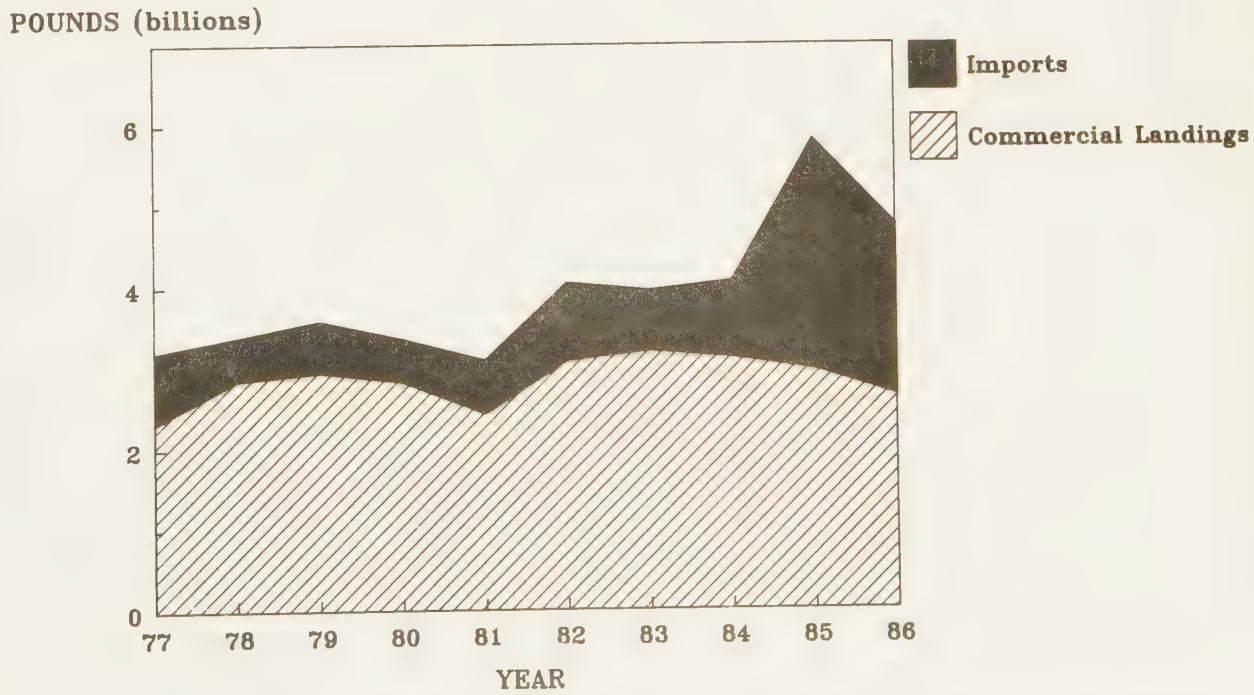
1977 – 1986



U.S. SUPPLY OF INDUSTRIAL FISHERY PRODUCTS

(ROUND WEIGHT)

1977 – 1986



U.S. SUPPLY OF EDIBLE AND INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1977-86
(Round weight)

Year	Domestic commercial landings		Imports (1)		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1977	5,271	49.5	5,381	50.5	10,652
1978 (2)	6,028	52.4	5,481	47.6	11,509
1979 (2)	6,267	53.0	5,564	47.0	11,831
1980 (2)	*6,482	57.1	4,875	42.9	11,357
1981 (2)	5,977	52.6	5,376	47.4	11,353
1982 (2)	6,367	53.0	5,644	47.0	12,011
1983 (2)	6,439	52.1	5,913	47.9	12,352
1984 (2)	6,438	51.3	6,114	48.7	12,552
1985 (2)	6,258	41.3	8,892	58.7	15,150
1986 (2)	6,031	42.2	8,337	57.8	14,368

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary.
*Record. Records--1968 imports: 13,221 million lb; 1968 total supply: 17,381 million lb.

Note:--The weights of U.S. landings and imports represent the round (live) weight of all items except univalve and bivalve mollusks (conchs, clams, oysters, scallops, etc.) which are shown in weight of meats (excluding the shell).

U.S. SUPPLY OF EDIBLE COMMERCIAL FISHERY PRODUCTS, 1977-86
(Round weight)

Year	Domestic commercial landings		Imports (1)		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1977	2,952	39.5	4,514	60.5	7,466
1978 (2)	3,177	39.1	4,958	60.9	8,135
1979 (2)	3,318	40.2	4,933	59.8	8,251
1980 (2)	*3,654	45.6	4,352	54.4	8,006
1981 (2)	3,547	42.9	4,720	57.1	8,267
1982 (2)	3,285	41.2	4,683	58.8	7,968
1983 (2)	3,238	38.5	5,175	61.5	8,413
1984 (2)	3,320	39.1	5,178	60.9	8,498
1985 (2)	3,294	35.3	6,043	64.7	9,337
1986 (2)	3,393	35.5	*6,227	64.5	*9,620

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa. (2) Preliminary. *Record.

U.S. SUPPLY OF INDUSTRIAL COMMERCIAL FISHERY PRODUCTS, 1977-86
(Round weight)

Year	Domestic commercial landings		Imports		Total
	Million pounds	Percent	Million pounds	Percent	Million pounds
1977	2,319	72.8	867	27.2	3,186
1978 (1)	2,851	84.5	523	15.5	3,374
1979 (1)	2,949	82.4	631	17.6	3,580
1980 (1)	2,828	84.4	523	15.6	3,351
1981 (1)	2,430	78.7	656	21.3	3,086
1982 (1)	3,082	76.2	961	23.8	4,043
1983 (1)	*3,201	81.3	738	18.7	3,939
1984 (1)	3,118	76.9	936	23.1	4,054
1985 (1)	2,964	51.0	2,849	49.0	5,813
1986 (1)	2,638	55,6	2,110	44.4	4,748

(1) Preliminary. *Record. Records--1968 imports: 9,989 million lb; 1968 total supply: 11,802 million lb.

U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1985 AND 1986

Item	Domestic commercial landings		Imports (1)		Total	
	1985	1986	1985	1986	1985	1986
	Million pounds, round weight					
Edible fishery products:						
Finfish	2,273	2,240	4,718	4,847	6,991	7,087
Shellfish	1,021	1,153	1,325	1,380	2,346	2,533
Total	3,294	3,393	6,043	6,227	9,337	9,620
Industrial fishery products:						
Finfish	2,942	2,631	(2)2,849	2,110	5,791	4,741
Shellfish	22	7	(3)	(3)	22	7
Total	2,964	2,638	(2)2,849	2,110	5,813	4,748
Total:						
Finfish	5,215	4,871	7,567	6,957	12,782	11,828
Shellfish	1,043	1,160	1,325	1,380	2,368	2,540
Total	6,258	6,031	8,892	8,337	15,150	14,368

See footnotes below.

VALUE OF U.S. SUPPLY OF COMMERCIAL FINFISH AND SHELLFISH, 1985 AND 1986

Item	Domestic commercial landings		Imports (1)		Total	
	1985	1986	1985	1986	1985	1986
	Million dollars					
Edible fishery products:						
Finfish	1,076	1,204	1,943	2,354	3,019	3,558
Shellfish	1,122	1,437	2,056	2,409	3,178	3,846
Total	2,198	2,641	3,999	4,763	6,197	7,404
Industrial fishery products:						
Finfish	117	115	(2)65	(2)50	182	165
Shellfish	11	7	(3)	(3)	11	7
Total	128	122	(2)65	(3)50	193	172
Total:						
Finfish	1,193	1,319	2,008	2,404	3,201	3,723
Shellfish	1,133	1,444	2,056	2,409	3,189	3,853
Total	2,326	2,763	4,064	4,813	6,390	7,576

(1) Excludes imports of edible fishery products consumed in Puerto Rico, but includes landings of foreign-caught tuna in American Samoa.

(2) Includes only quantity and value of fish meal and sea herring for industrial purposes.

(3) Not available.

Note:--Value of domestic commercial landings is exvessel value.

U.S. SUPPLY OF REGULAR AND MINCED BLOCKS, 1977-86
(Edible weight)

Year	U.S. production		Imports		Total supply
	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1977	2,138	.6	385,138	99.4	387,276
1978	1,879	.5	406,286	99.5	408,165
1979	4,857	1.2	*408,152	98.8	*413,009
1980	1,205	.4	336,117	99.6	337,322
1981	1,029	.3	344,111	99.7	345,140
1982	2,766	.9	318,966	99.1	321,732
1983	5,155	1.3	384,458	98.7	389,613
1984	2,655	.8	316,165	99.2	318,820
1985	2,551	.8	334,060	99.2	336,611
1986	3,919	1.1	363,897	98.9	367,816

*Record.

U.S. SUPPLY OF ALL FILLETS AND STEAKS, 1977-86
(Edible weight)

Year	U.S. production (1)		Imports		Total supply
	Quantity	Percentage of total supply	Quantity	Perentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1977	160,645	28.8	398,110	71.2	558,755
1978	184,356	30.3	423,749	69.7	608,105
1979	187,167	30.4	427,526	69.6	614,693
1980	202,779	35.5	369,161	64.5	571,940
1981	205,225	33.1	414,163	66.9	619,388
1982	217,644	33.0	440,916	67.0	658,560
1983	230,649	34.4	439,716	65.6	670,365
1984	252,288	34.8	473,594	65.2	725,882
1985	245,525	31.4	536,725	68.6	782,250
1986	*260,189	32.6	*538,532	67.4	*798,721

(1) Includes fillets used to produce blocks. *Record.

U.S. SUPPLY OF GROUNDFISH FILLETS AND STEAKS, 1977-86
(Edible weight)

Year	U.S. production (1)		Imports		Total supply
	Quantity	Percentage of total supply	Quantity	Percentage of total supply	Quantity
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds
1977	59,942	21.6	217,423	78.4	277,365
1978	65,573	22.0	233,106	78.0	298,679
1979	74,568	22.8	252,957	77.2	327,525
1980	67,221	23.3	220,954	76.7	288,175
1981	77,092	23.1	257,164	76.9	334,256
1982	70,994	19.4	295,193	80.6	366,187
1983	81,223	21.4	298,170	78.6	379,393
1984	94,943	23.6	*307,852	76.4	*402,795
1985	84,244	21.6	305,690	78.4	389,934
1986	92,729	24.4	287,099	75.6	379,828

(1) Includes fillets used to produce blocks. Species include: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic ocean perch. *Record. Record--1951 U.S. production: 148,786,000 lb.

U.S. COMMERCIAL LANDINGS AND IMPORTS OF TUNA, 1977-86

Year	Domestic commercial landings			Imports		
	Atlantic, Gulf, Pacific Coast States, and Hawaii	Puerto Rico	Total	Fresh and frozen including cooked loins and discs (1)	Canned	
					In oil	Not in oil
	Round weight				Product weight	
	Thousand pounds					
1977	333,874	123,666	457,540	670,072	178	34,453
1978	408,878	(2) 156,813	565,691	*870,259	207	51,574
1979	364,476	(2) 143,676	508,152	810,066	627	53,076
1980	399,432	(2) 100,606	500,038	770,396	446	63,107
1981	341,149	(2) 148,729	489,878	769,675	268	70,583
1982	261,409	(2) 211,679	473,088	589,558	213	87,366
1983	278,692	(2) 307,298	585,990	533,686	197	122,132
1984	211,830	(2) 371,089	582,919	497,079	277	162,036
1985	83,054	(2) 433,083	516,137	482,742	303	213,645
1986	87,811	(2) 469,034	556,845	567,524	301	*236,320

(1) Includes landings in American Samoa of foreign-caught fish.
(2) Includes a quantity of fish landed in American Samoa and other ports by U.S.-flag vessels.
*Record.

U.S. SUPPLY OF CANNED TUNA, 1977-86
(Canned weight)

Year	U.S. pack from domestic commercial landings (1)		U.S. pack from imported fresh and frozen tuna (2)		Total	Imported canned		Total Supply
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds		Percent	Thousand pounds
1977. . .	202,114	34.7	345,895	59.4	548,009	34,631	5.9	582,640
1978. . .	257,166	34.0	*447,627	59.2	*704,793	51,781	6.8	756,574
1979. . .	218,493	32.4	401,740	59.6	620,233	53,703	8.0	673,936
1980. . .	214,559	32.2	387,497	58.2	602,056	63,553	9.6	665,609
1981. . .	217,316	31.1	409,653	58.7	626,969	70,851	10.2	697,820
1982. . .	206,037	32.9	332,466	53.1	538,503	87,579	14.0	626,082
1983. . .	251,281	35.2	339,261	47.6	590,542	122,329	17.2	712,871
1984. . .	263,626	33.9	350,655	45.2	614,281	162,313	20.9	776,594
1985. . .	210,464	27.7	334,529	44.1	544,993	213,948	28.2	758,941
1986. . .	215,964	24.7	420,867	48.2	636,831	*236,621	27.1	*873,472

(1) Includes pack from landings by U.S.-flag vessels in Puerto Rico and American Samoa. (2) Includes tuna canned in American Samoa from foreign-caught fish. *Record.

U.S. SUPPLY OF CANNED SARDINES, 1977-86
(Canned weight)

Year	U.S. pack	Imports			Total	Exports	
		In oil	Not in oil	Total		Domestic	Foreign
	Thousand pounds						
1977	23,496	25,748	24,288	50,036	73,532	1,186	34
1978	25,909	24,231	24,486	48,717	74,626	1,555	173
1979	30,030	22,878	26,879	49,757	79,787	1,591	301
1980	19,500	18,218	32,960	51,178	70,678	1,839	78
1981	30,586	18,239	37,034	55,273	85,859	1,731	183
1982	18,003	14,119	35,925	50,044	68,047	1,049	195
1983	13,110	17,151	18,096	35,247	48,357	1,013	920
1984	14,650	17,535	27,216	44,751	59,401	889	860
1985	20,016	23,009	34,213	57,222	77,238	529	570
1986	15,601	22,949	30,315	53,264	68,865	271	287

*Record--1974 imports: 69,137,000 lb.

U.S. SUPPLY OF CANNED SALMON, 1977-86
(Canned weight)

Year	U.S. pack	Imports	Total	Exports	
				Domestic	Foreign
	Thousand pounds				
1977	135,689	585	136,274	21,275	11
1978	148,587	325	148,912	32,513	33
1979	148,822	434	149,256	50,907	70
1980	200,003	167	200,170	*74,006	58
1981	214,855	71	214,926	63,494	201
1982	112,100	158	112,258	41,156	111
1983	181,166	277	181,443	54,488	422
1984 (1)	198,926	551	199,477	48,963	245
1985 (1)	158,943	1,958	160,901	48,240	39
1986	141,965	4,623	146,588	59,434	(2)

(1) Revised. (2) Less than 500 lb. *Record. Records--1936 U.S.pack: 430,328,000 lb; 1959 imports: 31,154,000 lb.

U.S. SUPPLY OF CLAM MEATS, 1977-86
(Meat weight)

Year	U.S. commercial landings					Imports (1)	Total for U.S. consumption
	Hard	Soft	Surf	Other	Total		
	Thousand pounds						
1977	14,690	10,275	51,421	20,953	97,339	8,423	105,762
1978	13,295	10,091	39,237	25,088	87,711	6,131	93,842
1979	12,058	8,585	34,912	36,495	92,050	7,273	99,323
1980	13,370	8,948	37,737	35,314	95,369	6,908	102,277
1981	18,118	8,072	46,100	48,341	120,631	9,520	130,151
1982	12,855	8,021	49,720	37,709	108,305	11,122	119,427
1983	14,186	8,460	55,938	36,821	115,405	11,006	126,411
1984	14,749	7,919	70,243	40,010	132,921	11,113	144,034
1985	16,697	7,865	72,520	53,469	*150,551	12,979	*163,530
1986	11,793	5,887	78,749	48,964	145,393	*16,880	162,273

(1) Imports were converted to meat weight by using these conversion factors: 0.40, in shell or shucked; 0.30, canned chowder and juice; and 0.93, other. *Record.

U.S. SUPPLY OF KING CRAB, 1977-86
(Round weight)

Year	U.S. commercial landings	Exports (1)	
		Frozen	Canned
	Thousand pounds		
1977	98,399	17,819	1,428
1978	130,238	52,966	2,462
1979	154,589	64,187	4,616
1980	*185,624	50,525	1,988
1981	88,054	27,704	704
1982	38,492	8,958	1,071
1983	25,581	2,039	346
1984	17,204	3,521	448
1985	15,363	4,053	752
1986	25,909	6,941	265

(1) Domestic merchandise. Converted to round (live) weight by using these conversion factors: 1.75, frozen; and 5.33, canned. *Record.

U.S. SUPPLY OF SNOW (TANNER) CRABS, 1977-86
(Round weight)

Year	U.S. commercial landings	Imports (1)	Total	Exports (2)
	Thousand pounds			
1977	98,463	4,538	103,001	47,045
1978	129,506	4,460	133,966	67,530
1979	*131,393	4,254	135,647	91,543
1980	121,684	3,732	125,416	71,871
1981	107,474	3,460	110,934	68,156
1982	68,767	3,135	71,902	47,220
1983	61,077	3,362	64,439	34,415
1984	48,765	4,992	53,757	31,127
1985	85,742	6,572	92,314	47,436
1986	110,000	5,510	115,510	66,925

(1) Converted to round (live) weight by multiplying canned weight by 5.00. (2) Domestic merchandise converted to round (live) weight by multiplying frozen weight by 2.13 (believed to be mostly sections). Data for foreign exports not available. *Record.

U.S. SUPPLY OF CANNED CRABMEAT, 1977-86
(Canned weight)

Year	U.S. pack	Percentage of total	Imports	Percentage of total	Total	Exports (1)
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds	Thousand pounds
1977	4,622	57.2	3,463	42.8	8,085	268
1978	3,593	47.0	4,053	53.0	7,646	462
1979	2,958	36.8	5,073	63.1	8,031	866
1980	3,916	43.9	5,002	56.1	8,918	373
1981	1,725	25.6	5,019	74.4	6,744	132
1982	1,349	19.0	5,737	81.0	7,086	201
1983	1,435	18.1	6,505	81.9	7,940	65
1984	1,084	14.8	6,233	85.2	7,317	84
1985 (1)	553	6.8	7,584	93.2	8,137	141
1986	565	6.0	8,778	94.0	9,343	50

(1) Domestic king crab only. (2) Revised. Records--1966 U.S. pack: 11,002,000 lb; 1939 imports: 13,507,000 lb.

U.S. SUPPLY OF AMERICAN LOBSTERS, 1977-86
(Round weight)

Year	U.S. commercial landings		Imports(1)				Total supply
			Quantity			Percentage of total supply	
	Quantity	Percentage of total supply	Fresh and frozen	Canned	Total		
	Thousand pounds	Percent	- - - Thousand pounds - - -			Percent	Thousand pounds
1977	31,773	52.5	16,944	11,818	28,762	47.5	60,535
1978	34,419	55.9	16,468	10,648	27,116	44.1	61,535
1979	37,184	54.5	22,790	8,307	31,097	45.5	68,281
1980	36,952	53.4	22,503	9,699	32,202	46.6	69,154
1981	37,494	48.2	26,857	13,459	40,316	51.8	77,810
1982	39,445	48.6	26,205	15,480	41,685	51.4	81,130
1983	44,206	47.7	43,439	4,977	48,416	52.3	92,622
1984	43,967	43.9	54,359	1,783	56,142	56.1	100,109
1985	*46,152	42.9	57,358	4,029	61,387	57.1	107,539
1986	46,053	40.8	65,276	1,633	*66,909	59.2	*112,962

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 4.50, meat; and 4.64, canned. *Record.

U.S. SUPPLY OF SPINY LOBSTERS, 1977-86
(Round weight)

Year	U.S. commercial landings		Imports (1)				Total supply
			Quantity			Percentage of total supply	
	Quantity	Percentage of total supply	Fresh and frozen	Canned	Total		
	Thousand pounds	Percent	- - - Thousand pounds - - -			Percent	Thousand pounds
1977	6,660	4.2	149,156	1,517	150,673	95.8	157,333
1978	4,629	3.1	143,945	563	144,508	96.9	149,137
1979	6,301	4.0	150,470	604	151,074	96.0	157,375
1980	6,861	5.4	119,817	395	120,212	94.6	127,073
1981	6,619	4.9	126,210	978	127,188	95.1	133,807
1982	6,438	5.1	120,679	230	120,909	94.9	127,347
1983	5,218	3.8	131,102	588	131,690	96.2	136,908
1984	6,303	4.1	146,990	79	147,069	95.9	153,372
1985	5,311	3.5	148,324	253	148,577	96.5	153,888
1986	6,775	4.5	144,933	164	145,097	95.5	151,872

(1) Imports were converted to round (live) weight by using these conversion factors: 1.00, whole; 3.00, tails; 4.35, other; and 4.50, canned. *Record. Records--1972 landings, 12,215,000 lb.; 1976 imports, 168,095,000; and 1976 total supply, 173,738,000 lb.

U.S. SUPPLY OF OYSTERS, 1977-86
(Meat weight)

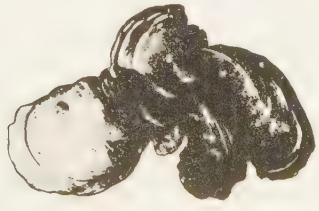
Year	U.S. commercial landings			Imports (2)	Total for U.S. consumption
	Eastern (1)	Pacific	Total		
	Thousand pounds				
1977	42,879	7,209	50,088	29,774	79,862
1978	45,183	5,800	50,983	33,843	84,826
1979	42,325	5,756	48,081	27,131	75,212
1980	42,439	6,642	49,081	21,732	70,813
1981	44,440	5,612	50,052	25,769	75,821
1982	48,489	5,839	54,328	27,529	81,857
1983	44,729	5,431	50,160	30,775	80,935
1984	41,808	6,479	48,287	36,086	84,373
1985	36,578	7,595	44,173	45,926	90,099
1986	35,013	5,531	40,544	*50,038	90,582

(1) Includes Western. (2) Imports were converted to meat weight by using these conversion factors: 0.93, canned; 3.12, canned smoked; and 0.75, other. *Record. Record - 1908 landings: 152,046,000 lb.

U.S. SUPPLY OF SCALLOP MEATS, 1977-86
(Edible weight)

Year	U.S. commercial landings				Imports	Total for U.S. consumption
	Bay	Calico	Sea	Total		
	Thousand pounds					
1977	1,546	1,114	25,853	28,513	29,786	58,299
1978	1,371	948	30,976	33,295	28,367	61,662
1979	1,774	863	31,466	34,103	25,155	59,258
1980	968	-	28,752	29,720	20,885	50,605
1981	670	14,641	30,277	45,588	26,227	71,815
1982	1,780	11,010	21,325	34,115	20,860	54,975
1983	2,338	9,606	20,478	32,422	34,280	66,702
1984	1,728	39,330	18,427	*59,485	27,270	*86,755
1985	1,331	12,513	15,829	29,673	42,035	71,708
1986	735	1,616	19,992	22,343	*47,916	70,259

*Record.



U.S. SUPPLY OF ALL FORMS OF SHRIMP, 1977-86
(Heads-off weight)

Year	U.S. Commercial landings	Imports (1)	Total	Exports (2)			
				Fresh and frozen		Canned	
				Domestic	Foreign	Domestic	Foreign
	Thousand pounds						
1977	*288,295	271,811	560,106	30,785	8,902	18,111	121
1978	256,882	240,414	497,296	41,065	13,308	12,088	146
1979	205,587	269,263	474,850	34,143	5,826	11,047	63
1980	207,869	258,069	465,938	18,777	9,567	11,781	*935
1981	218,900	259,112	478,012	20,777	13,687	9,181	78
1982	175,613	319,596	495,209	18,350	12,738	6,064	45
1983	155,591	421,179	576,770	21,776	6,560	7,573	28
1984	188,132	422,340	610,472	15,961	5,069	5,478	83
1985	207,239	452,232	659,471	17,708	5,735	3,159	338
1986	244,409	*492,005	*736,414	23,650	2,548	3,967	285

(1) Imports were converted to heads-off weight by using these conversion factors: 0.63, breaded; 1.00, shell-on; 1.28, peeled raw; 2.52, canned; and 2.40, other. (2) Exports were converted to heads-off weight by using these conversion factors: domestic--fresh and frozen, 1.18 and canned 2.02; foreign--fresh and frozen, 1.00 and canned, 2.52.

*Record. Records--1973 fresh and frozen domestic exports: 44,172,000 lb; 1970 fresh and frozen foreign exports: 14,699,000 lb; 1973 domestic canned: 20,097,000 lb.

U.S. SUPPLY OF CANNED SHRIMP, 1977-86
(Canned weight)

Year	U.S. pack		Imports		Total	Exports	
						Domestic	Foreign
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pounds		
1977	24,974	89.9	2,809	10.1	27,783	8,966	48
1978	16,201	85.5	2,739	14.5	18,940	5,984	58
1979	11,118	72.2	4,288	27.8	15,406	5,469	25
1980	15,289	78.4	4,225	21.6	19,514	5,832	*371
1981	9,693	68.9	4,383	31.1	14,076	4,545	31
1982	6,276	54.1	5,332	45.9	11,608	3,002	18
1983	6,723	33.8	13,176	66.2	19,899	3,749	11
1984	7,246	34.8	13,580	65.2	20,826	2,712	33
1985 (1)	4,001	19.0	17,088	81.0	21,089	1,564	134
1986	4,587	22.6	15,757	77.4	20,344	1,964	113

(1) Revised. *Record. Records--1973 U.S. pack: 25,228,000 lb; 1970 total: 29,001,000; 1973 domestic exports: 9,949 lb.

U.S. SUPPLY OF FISH MEAL AND SOLUBLES, 1977-86
(Product weight)

Year	Domestic production (1)		Imports		Total
	Thousand pounds	Percent	Thousand pounds	Percent	Thousand pound
1977	686,912	80.7	163,802	19.3	850,714
1978	888,364	91.0	(2) 87,802	9.0	976,166
1979	883,514	83.1	(2) 179,226	16.9	1,062,740
1980	857,526	89.6	(2) 99,074	10.4	956,600
1981	765,640	86.6	(2) 118,868	13.4	884,508
1982	899,356	84.2	(2) 168,664	15.8	1,068,020
1983	*922,040	87.2	(2) 135,880	12.8	1,057,920
1984	877,566	84.0	(2) 166,888	16.0	1,044,454
1985	883,196	63.4	(2) 510,654	36.6	1,393,850
1986	799,912	68.3	(2) 370,548	31.7	1,170,460

(1) Includes shellfish meal production. (2) Data do not include imports of fish solubles. *Record. Records--1968 imports: 1,712,344 thousand pounds, 1968 total supply: 2,254,450 thousand pounds.

Note:--Wet weight of solubles has been converted to dry weight by reducing its poundage by one-half.

U.S. SUPPLY OF FISH MEAL, 1977-86
(Product weight)

Year	Domestic production (1)	Imports	Total supply	Exports	
				Domestic	Foreign
	Thousand pounds				
1977	564,582	162,982	727,564	72,206	2,192
1978	725,820	87,802	813,622	101,400	7,866
1979	748,586	179,226	927,812	31,402	1,510
1980	723,844	99,074	822,918	170,562	2,942
1981	637,018	118,868	755,886	94,054	5,384
1982	746,854	168,664	915,518	35,880	4,662
1983	*763,536	135,880	899,416	154,834	6,848
1984	751,528	166,888	918,416	40,356	1,234
1985	721,682	510,654	1,232,336	69,166	808
1986	702,338	370,548	1,072,886	77,020	952

(1) Includes shellfish meal. *Record. Records--1968 imports: 1,710,570 thousand pounds; 1968 total supply and total for U.S. consumption: 2,180,842 thousand pounds.

U.S SUPPLY OF FISH OILS, 1977-86

Year	Domestic production	Imports (1)	Total supply	Exports	Total for U.S. consumption
	Thousand pounds				
1977	133,182	13,731	146,913	90,633	56,280
1978	296,287	16,040	312,327	222,012	90,315
1979	267,949	14,455	282,404	198,497	83,907
1980	312,511	21,350	333,861	284,009	49,852
1981	184,302	18,255	202,557	238,308	(2)
1982	347,513	12,699	360,212	202,345	157,867
1983	*399,334	15,334	414,668	*404,087	10,581
1984	372,804	13,426	386,230	399,425	(2)
1985	285,077	17,254	302,331	279,080	23,251
1986	336,804	19,212	356,016	192,214	163,802

(1) Excludes fish liver oils. (2) The 1981 and 1984 exports, which included prior year stocks, exceeded domestic production plus imports. *Record.

Note:--Does not include exports of foreign merchandise.

PER CAPITA

U.S. CONSUMPTION

Annual per capita consumption of seafood products represents the pounds of edible meat consumed from domestically-caught and imported fish and shellfish adjusted for beginning and ending inventories, and exports, divided by the civilian population of the United States as of July 1 of each year.

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1910-86

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	Million persons	Pounds, edible meat			
1910	92.2	4.5	2.8	3.9	11.2
1911	93.9	4.8	2.8	3.7	11.3
1912	95.3	5.0	2.9	3.4	11.3
1913	97.2	5.3	2.9	3.3	11.5
1914	99.1	5.6	3.0	3.1	11.7
1915	100.5	5.8	2.4	3.0	11.2
1916	102.0	6.0	2.2	2.8	11.0
1917	103.3	6.2	2.0	2.7	10.9
1918	103.2	6.4	2.0	2.5	10.9
1919	104.5	6.4	2.8	2.4	11.6
1920	106.5	6.3	3.2	2.3	11.8
1921	108.5	6.2	2.2	2.1	10.5
1922	110.0	6.1	3.2	2.0	11.3
1923	111.9	6.0	2.9	1.8	10.7
1924	114.1	6.1	3.2	1.7	11.0
1925	115.8	6.3	3.2	1.6	11.1
1926	117.4	6.6	3.4	1.4	11.4
1927	119.0	7.0	3.9	1.3	12.2
1928	120.5	7.1	3.9	1.1	12.1
1929	121.8	6.9	3.9	1.1	11.9
1930	122.9	5.8	3.4	1.0	10.2
1931	123.9	4.9	3.2	.7	8.8
1932	124.7	4.3	3.4	.7	8.4
1933	125.4	4.2	3.9	.6	8.7
1934	126.2	4.3	4.2	.7	9.2
1935	127.1	5.1	4.7	.7	10.5
1936	127.9	5.2	*5.8	.7	11.7
1937	128.6	5.6	5.3	.9	11.8
1938	129.6	5.2	4.8	.8	10.8
1939	130.7	5.3	4.7	.7	10.7
1940	132.1	5.7	4.6	.7	11.0
1941	132.1	6.3	4.2	.7	11.2
1942	131.4	5.2	2.9	.6	8.7
1943	128.0	5.5	1.8	.6	7.9
1944	127.2	5.5	2.6	.6	8.7
1945	128.1	6.6	2.6	.7	9.9
1946	138.9	5.9	4.2	.7	10.8
1947	143.1	5.8	3.8	.7	10.3
1948	145.7	6.0	4.4	.7	11.1
1949	148.2	5.8	4.5	.6	10.9
1950	150.8	6.3	4.9	.6	11.8
1951	151.6	6.3	4.3	.6	11.2
1952	153.9	6.2	4.3	.7	11.2
1953	156.6	6.4	4.3	.7	11.4
1954	159.7	6.2	4.3	.7	11.2
1955	163.0	5.9	3.9	.7	10.5
1956	166.1	5.7	4.0	.7	10.4
1957	169.1	5.5	4.0	.7	10.2
1958	172.2	5.7	4.3	.6	10.6
1959	175.3	5.9	4.4	.6	10.9

See notes at end of table.

(Continued)

U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF COMMERCIAL FISH AND SHELLFISH, 1910-86 - Continued

Year	Civilian resident population July 1 (1)	Per capita consumption			
		Fresh and frozen (2)	Canned (3)	Cured (4)	Total
	Million persons	Pounds, edible meat			
1960	178.1	5.7	4.0	0.6	10.3
1961	181.1	5.9	4.3	.5	10.7
1962	183.7	5.8	4.3	.5	10.6
1963	186.5	5.8	4.4	.5	10.7
1964	189.1	5.9	4.1	.5	10.5
1965	191.6	6.0	4.3	.5	10.8
1966	193.4	6.1	4.3	.5	10.9
1967	195.3	5.8	4.3	.5	10.6
1968	197.1	6.2	4.3	.5	11.0
1969	199.1	6.6	4.2	.4	11.2
1970	201.9	6.9	4.5	.4	11.8
1971	204.9	6.7	4.3	.5	11.5
1972	207.5	7.1	4.9	.5	12.5
1973	209.6	7.4	5.0	.4	12.8
1974	211.6	6.9	4.7	.5	12.1
1975	213.8	7.5	4.3	.4	12.2
1976	215.9	8.2	4.2	.5	12.9
1977 (6)	218.1	7.7	4.6	.4	12.7
1978 (6)	220.5	8.1	5.0	.3	13.4
1979 (6)	223.0	7.8	4.8	.4	13.0
1980 (6)	225.6	8.0	4.5	.3	12.8
1981 (6)	227.7	7.8	4.8	.3	12.9
1982 (6)	229.9	7.7	4.3	.3	12.3
1983 (6)	232.0	8.0	4.8	.3	13.1
1984 (6)	234.8	8.5	4.9	.3	13.7
1985 (6)	237.0	*9.0	5.1	.3	14.4
1986 (6)	239.4	9.0	5.4	.3	*14.7

(1) Resident population for 1910 to 1929 and civilian resident population for 1930 to date.

(2) Fresh and frozen fish consumption from 1910 to 1928 is estimated. Beginning in 1973, data include consumption of artificially cultivated catfish.

(3) Canned fish consumption for 1910 to 1920 is estimated. Beginning in 1921, it is based on production reports, packer stocks, and foreign trade statistics for individual years.

(4) Cured fish consumption for 1910 to 1928 is estimated.

(5) Data for 1909 estimate based on the 1908 census and foreign trade data.

(6) Domestic landings data used in calculating these data are preliminary.

*Record.

Note:--These consumption figures refer only to consumption of fish and shellfish entering commercial channels, and they do not include data on consumption of recreationally caught fish and shellfish which since 1970 is estimated to be between 3 to 4 pounds (edible meat) per person annually. The figures are calculated on the basis of raw edible meat, i.e. excluding bones, viscera, shells, etc. U.S. Department of Agriculture (USDA) consumption figures for red meats and poultry are based on the retail weight of the products, as purchased in retail stores. USDA estimates the net edible weight to be about 70-95 percent of the retail weight, depending on the cut and type of meat. From 1970 through 1980, data were revised to reflect the results of the 1980 census.

PER CAPITA

U.S. CONSUMPTION

U.S. ANNUAL PER CAPITA CONSUMPTION OF CANNED FISHERY PRODUCTS, 1967-86

Year	Salmon	Sardines	Tuna	Shellfish	Other	Total
			Pounds			
1967	.7	.4	2.4	.5	.3	4.3
1968	.7	.4	2.4	.5	.3	4.3
1969	.7	.4	2.4	.5	.2	4.2
1970	.7	.4	2.5	.5	.4	4.5
1971	.7	.4	2.4	.5	.3	4.3
1972	.7	.4	2.9	.5	.4	4.9
1973	.4	.5	3.1	.5	.5	5.0
1974	.3	.4	3.1	.5	.4	4.7
1975	.3	.2	2.9	.5	.4	4.3
1976	.3	.3	2.8	.4	.4	4.2
1977 (1)	.5	.3	2.8	.6	.4	4.6
1978 (1)	.6	.3	3.3	.5	.3	5.0
1979 (1)	.5	.3	3.2	.5	.3	4.8
1980 (1)	.5	.3	2.9	.5	.3	4.5
1981 (1)	.5	.4	3.1	.5	.3	4.8
1982 (1)	.5	.3	2.7	.4	.4	4.3
1983 (1)	.5	.2	3.1	.6	.4	4.8
1984 (1)	.6	.2	3.2	.4	.5	4.9
1985 (1)	.5	.3	3.3	.5	.5	5.1
1986 (1)	.5	.3	3.6	.4	.6	5.4

(1) Preliminary. Note:--From 1970 through 1980, data were revised to reflect the results of the 1980 census.

U.S. ANNUAL PER CAPITA CONSUMPTION OF CERTAIN FISHERY ITEMS, 1967-86

Year	Fillets and steaks (1)	Sticks and portions	Shrimp, all preparations
		Pounds (2)	
1967	1.6	1.2	1.3
1968	1.9	1.3	1.4
1969	2.0	1.6	1.3
1970	2.2	1.7	1.5
1971	2.0	1.6	1.4
1972	2.3	1.8	1.4
1973	2.5	2.0	1.4
1974	2.1	1.8	1.5
1975	2.4	1.8	1.4
1976	2.5	2.0	1.5
1977 (3)	2.5	2.0	1.6
1978 (3)	2.7	2.2	1.5
1979 (3)	2.7	*2.2	1.3
1980 (3)	2.6	1.9	1.4
1981 (3)	2.7	1.8	1.5
1982 (3)	2.7	1.7	1.5
1983 (3)	2.9	1.8	1.7
1984 (3)	3.0	1.8	1.9
1985 (3)	*3.2	1.8	2.0
1986 (3)	3.2	1.8	*2.2

(1) Data include groundfish and other species. Data do not include blocks, but fillets could be made into blocks from which sticks and portions could be produced.
(2) Product weight of fillets and steaks and sticks and portions, edible (meat) weight of shrimp.
(3) Domestic landings data used in calculating these data are preliminary.
*Record.
Note:--From 1970 through 1980, data were revised to reflect the results of the 1980 census.

U.S. USE

Per capita use of commercial fish and shellfish is based on the supply of fishery products, both edible and nonedible (industrial), on a round weight equivalent basis, without considering beginning or ending stocks, defense purchases, or exports (see page 70).

Per capita use figures are not comparable with per capita consumption data (see page 80). Per capita consumption figures represent edible (for human use) meat weight consumption rather than round weight consumption. In addition, per capita consumption includes allowances for beginning and ending stocks and exports, whereas the use does not include such allowances.

Per capita use is derived by using total population including U.S. Armed Forces overseas. The per capita consumption is derived by using civilian resident population.

U.S. ANNUAL PER CAPITA USE OF COMMERCIAL FISH AND SHELLFISH, 1953-86

Year	Total population including armed forces overseas July 1	Total U.S. supply (1)	Per capita utilization		
			Commercial landings	Imports	Total
	Million persons	Million pounds	Pounds		
1953	160.2	7,015	28.0	15.8	43.8
1954	163.0	7,593	29.2	17.4	46.6
1955	165.9	7,121	29.0	13.9	42.9
1956	168.9	7,569	31.2	13.6	44.8
1957	172.0	7,164	27.9	13.8	41.7
1958	174.9	7,526	27.1	15.9	43.0
1959	177.8	8,460	28.8	18.8	47.6
1960	180.7	8,223	27.3	18.2	45.5
1961	183.7	9,570	28.2	23.9	52.1
1962	186.5	10,408	28.7	27.1	55.8
1963	189.2	11,434	25.6	34.8	60.4
1964	191.9	12,031	23.7	39.0	62.7
1965	194.3	10,535	24.6	29.6	54.2
1966	196.6	12,469	22.2	41.2	63.4
1967	198.7	13,991	20.4	50.0	70.4
1968	200.7	17,381	20.7	65.9	86.6
1969	202.7	11,847	21.4	37.0	58.4
1970	205.1	11,474	24.0	31.9	55.9
1971	207.7	11,804	24.1	32.7	56.8
1972	209.9	13,849	22.9	43.1	66.0
1973	211.9	10,378	22.9	26.1	49.0
1974	213.9	9,875	23.2	23.0	46.2
1975	216.0	10,164	22.6	24.5	47.1
1976	218.0	11,593	24.7	28.5	53.2
1977 (2)	220.2	10,652	23.9	24.4	48.3
1978 (2)	222.6	11,509	27.1	24.6	51.7
1979 (2)	225.1	11,831	27.9	24.7	52.6
1980 (2)	227.7	11,357	28.5	21.4	49.9
1981 (2)	229.8	11,353	26.0	23.4	49.4
1982 (2)	232.1	12,011	27.5	24.3	51.8
1983 (2)	234.2	12,352	27.5	25.2	52.7
1984 (2)	237.0	12,552	27.2	25.8	53.0
1985 (2)	239.3	15,061	26.2	36.8	63.0
1986 (2)	241.6	14,368	25.0	34.5	59.5

(1) Data include U.S. commercial landings and imports of both edible and nonedible (industrial) fishery products on a round-weight basis. "Total supply" is not adjusted for beginning and ending stocks, defense purchases, or exports.

(2) Domestic landings data used in calculating these data are preliminary.

Note:--From 1970 through 1980, population and per capita utilization data were revised to reflect the results of the 1980 census.

WORLD CONSUMPTION

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1980-82 AVERAGE

Region and country	Estimated live weight equivalent	
	Kilograms	Pounds
North America:		
Canada	21.4	47.2
United States	16.6	36.6
Latin America:		
Argentina	4.6	10.1
Bolivia	3.0	6.6
Brazil	6.3	13.9
Chile	29.6	65.3
Colombia	4.4	9.7
Costa Rica	5.0	11.0
Cuba	18.7	41.2
Dominican Republic	8.2	18.1
Ecuador	14.1	31.1
El Salvador	2.1	4.4
Guatemala	0.6	1.3
Guyana	24.5	54.0
Haiti	3.0	6.6
Honduras	1.2	2.6
Jamaica	17.4	38.3
Mexico	11.3	24.9
Nicaragua	0.9	2.0
Panama	12.4	27.3
Paraguay	1.0	2.2
Peru	30.0	66.1
Suriname	21.8	48.1
Trinidad and Tobago	14.4	31.7
Uruguay	7.3	16.1
Venezuela	13.0	28.7
Europe:		
Albania	1.4	3.1
Austria	6.2	13.7
Belgium and Luxembourg	18.9	41.7
Bulgaria	6.5	14.3
Czechoslovakia	5.2	11.5
Denmark	46.0	101.4
Fed. Republic of Germany	8.4	18.5
Finland	31.2	68.8
France	24.3	53.6
German Democratic Rep	14.5	32.0
Greece	17.1	37.7
Hungary	3.9	8.6
Iceland	80.4	177.2
Ireland	16.2	35.7
Italy	12.7	28.0
Malta	21.2	46.7
Netherlands	8.7	19.2
Norway	49.1	108.2
Poland	16.2	35.7
Portugal	28.9	63.7
Romania	7.1	15.7
Spain	34.8	76.7
Sweden	32.3	71.2
Switzerland	10.9	24.0
United Kingdom	17.5	38.6
Yugoslavia	3.3	7.3
USSR	25.8	56.9
Near East:		
Afghanistan	0.1	0.2
Cyprus	9.3	20.5
Egypt	5.2	11.5
Iran	1.2	2.6
Iraq	2.6	5.7
Israel	15.3	33.7
Jordan	2.5	5.5
Lebanon	3.7	8.2
Libya	8.4	18.5
Saudi Arabia	9.2	20.3
Sudan	1.5	3.3
Syria	1.7	3.7
Turkey	7.6	16.8
Yemen Arab Republic	3.8	8.4
Yemen (Aden)	17.9	39.5
Far East:		
Bangladesh	7.5	16.5
Burma	14.5	32.0
China	4.3	9.5
Hong Kong	52.1	114.9
India	3.2	7.1
Indonesia	11.8	26.0
Japan	86.0	189.6
Laos	5.2	11.5
Malaysia	47.6	104.9
Mongolia	0.8	1.8
Nepal	0.3	0.7
North Korea	40.1	88.4
Pakistan	2.3	5.1
Philippines	33.4	73.6
Republic of Korea	43.6	96.1
Singapore	32.6	71.9
Sri Lanka (Ceylon)	14.9	32.8
Thailand	20.2	44.5
Vietnam	11.4	25.1

See note at end of table.

(Continued)

ANNUAL PER CAPITA CONSUMPTION OF FISH AND SHELLFISH FOR HUMAN FOOD, BY REGION AND COUNTRY, 1980-82 AVERAGE - Continued

Region and country	Estimated live weight equivalent	
	Kilograms	Pounds
Africa:		
Algeria	3.0	6.6
Angola	9.2	20.3
Benin	8.6	19.0
Botswana	1.9	4.2
Burundi	3.3	7.3
Cameroon	10.4	22.9
Central African Republic	5.7	12.6
Congo (Brazzaville)	35.0	77.2
Ethiopia	0.1	0.2
Ghana	18.9	41.7
Guinea	5.7	12.6
Ivory Coast	19.3	42.5
Kenya	3.5	7.7
Liberia	15.8	34.8
Madagascar	5.0	11.0
Malawi	8.6	19.0
Mali	5.6	12.3
Mauritania	17.0	37.5
Mauritius	16.8	37.0
Morocco	6.4	14.1
Mozambique	3.6	7.9
Niger	1.1	2.4
Nigeria	16.3	35.9
Republic of South Africa	11.3	24.9
Rwanda	0.2	0.4
Senegal	26.9	59.3
Sierra Leone	19.3	42.5
Somalia	2.1	4.6
Tanzania	11.7	25.8
Togo	12.3	27.1
Tunisia	8.0	17.6
Uganda	12.3	27.1
Zaire	5.6	12.3
Zambia	9.3	20.5
Oceania:		
Australia	14.9	32.8
New Zealand	9.6	21.2
Papua New Guinea	10.2	22.5
World	12.3	27.1

Note:--Data for most countries are tentative. Aquatic plants are included where applicable.

Source:--Food and Agriculture Organization of the United Nations (FAO), Rome.

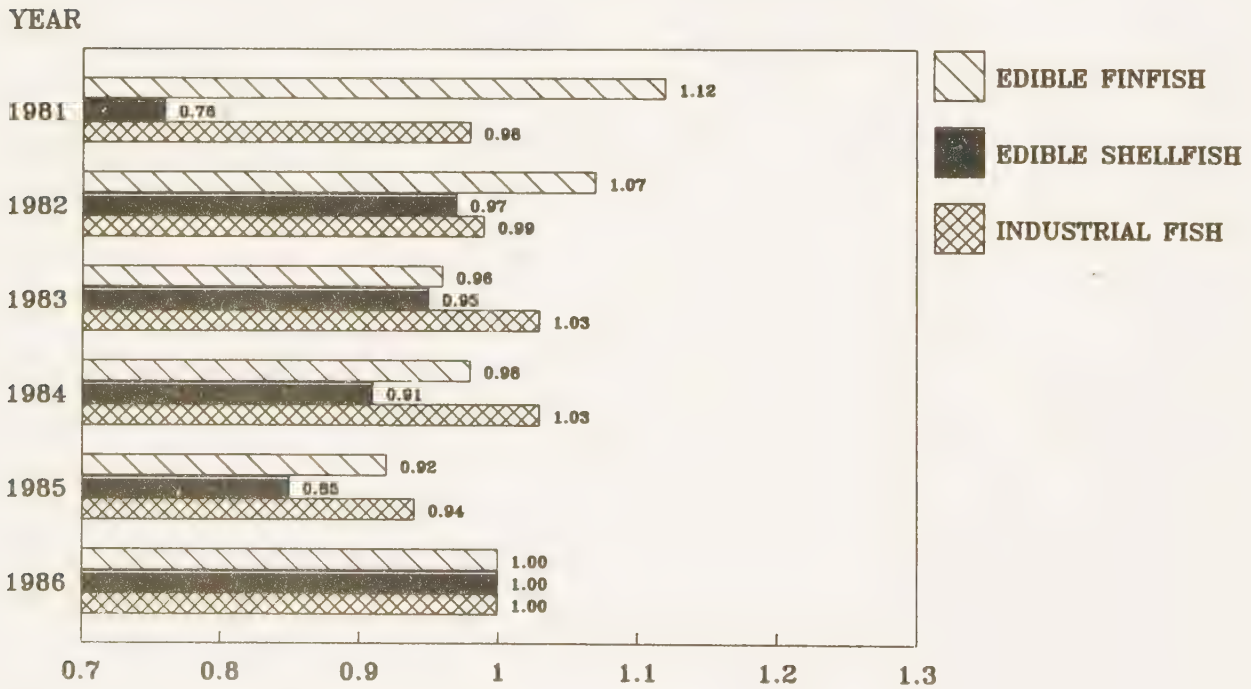
The procedure for calculating the Index of Exvessel Prices for all fish and shellfish has been reviewed and modified for inclusion in this year's publication. Major changes in the U.S. fishing industry have occured since the index was originally designed. The result was that the "market basket" or group of species used to calculate the index was no longer representative of the price trends for all fish and shellfish. The index has been recalculated with a new market basket and 1986 as the base year. The result is a recalculated index for 1981-86. A monthly index of exvessel prices will be added to the 1987 publication.

In the table that follows, the exvessel price for any given year was obtained by dividing total value by total quantity as reported in the catch by species or distance from shore tables. The index for each species or group was obtained by multiplying the current annual price by the total quantity caught in 1986 (the base year). That number was then divided by the 1986 value to obtain the final index:

$$\frac{\text{(Current price X 1986 quantity)}}{\text{1986 Annual Value}} = \text{Index}$$

Each index number calculated for years other than the base year of 1986 measures price changes from the reference period (1986) which equals 1.00. A species of fish that sold for $0.75 a pound in 1981 and a $1.00 a pound in 1986 would have an index of 0.75 in 1981. In 1987, if the price of the same species increases 5 percent to $1.05, the index in 1987 would be 1.05.

INDEXES OF EXVESSEL PRICES, 1981-86
PERCENT - (1986 = 100)



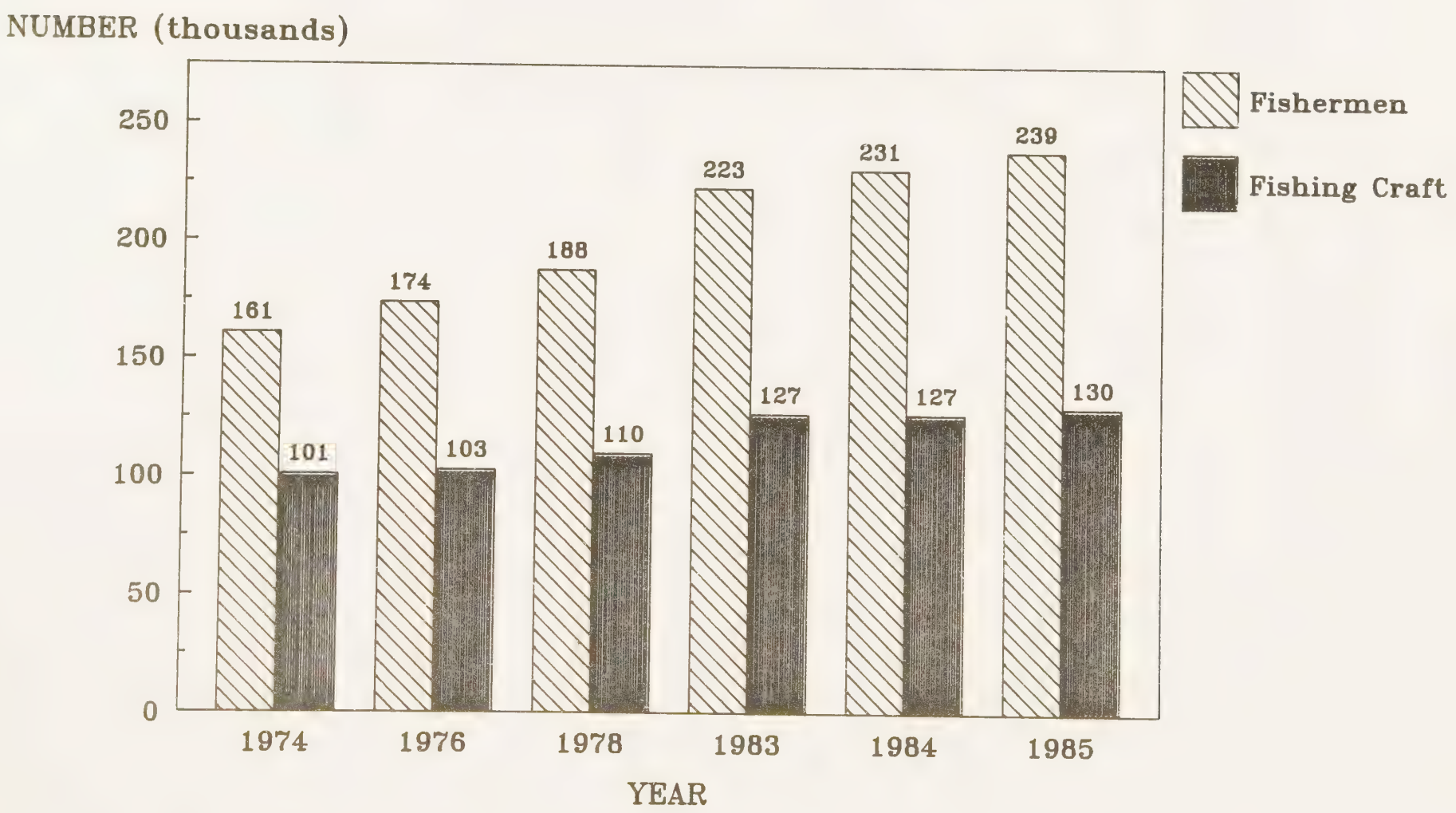
PRICE INDEXES

EXVESSEL

INDEXES OF EXVESSEL PRICES FOR FISH AND SHELLFISH, BY YEARS, 1981-86
(1986=100)

SPECIES	1981	1982	1983	1984	1985	1986
GROUNDFISH:						
COD	1.37	1.44	1.16	1.11	1.09	1.00
HADDOCK	0.40	0.50	0.59	0.71	0.94	1.00
ATLANTIC POLLOCK	0.89	0.87	0.68	0.63	0.62	1.00
ALASKAN POLLOCK	1.40	1.18	0.87	0.90	0.93	1.00
FLOUNDERS	1.50	1.55	1.53	1.63	1.09	1.00
TOTAL GROUNDFISH	1.39	1.36	1.20	1.25	1.02	1.00
HALIBUT	0.75	0.81	0.84	0.50	0.59	1.00
HERRING	0.53	0.75	1.05	0.62	1.08	1.00
SALMON:						
CHINOOK	1.11	1.11	0.78	1.05	0.97	1.00
CHUM	1.12	1.12	1.08	0.99	0.98	1.00
PINK	2.10	1.10	1.21	1.22	1.15	1.00
RED	0.59	0.62	0.49	0.59	0.70	1.00
COHO	1.19	1.25	0.84	1.14	1.11	1.00
TOTAL SALMON	0.91	0.82	0.67	0.79	0.84	1.00
SWORDFISH	0.74	0.90	0.87	0.94	0.88	1.00
TUNA:						
ALBACORE	1.69	1.28	1.14	1.16	1.00	1.00
BLUEFIN	1.25	1.24	3.15	3.65	1.99	1.00
SKIPJACK	1.57	1.47	1.22	1.17	0.97	1.00
YELLOWFIN	1.45	1.39	1.28	1.23	1.05	1.00
TOTAL TUNA	1.50	1.41	1.31	1.29	1.05	1.00
TOTAL EDIBLE FINFISH	1.12	1.07	0.96	0.98	0.92	1.00
CLAMS:						
HARD	0.71	0.84	0.75	0.85	0.77	1.00
OCEAN QUAHOG	0.81	0.90	0.88	0.88	0.88	1.00
SOFT	0.55	0.58	0.66	0.80	0.87	1.00
SURF	0.94	0.96	0.82	0.90	0.99	1.00
TOTAL CLAMS	0.78	0.85	0.78	0.87	0.88	1.00
CRABS:						
BLUE	0.76	0.80	0.91	0.88	0.89	1.00
DUNGENESS	0.63	0.73	0.98	1.15	1.07	1.00
KING	0.52	0.86	0.77	0.68	0.76	1.00
SNOW	0.58	1.39	1.16	0.94	0.79	1.00
TOTAL CRABS	0.60	1.01	0.95	0.86	0.84	1.00
AMERICAN LOBSTER	0.88	0.88	0.92	0.99	0.95	1.00
OYSTERS	0.71	0.73	0.70	0.87	0.82	1.00
SCALLOPS:						
BAY	0.41	0.44	0.62	0.55	0.50	1.00
CALICO	0.50	0.54	0.65	0.29	0.52	1.00
SEA	0.75	0.75	1.12	1.09	0.97	1.00
TOTAL SCALLOPS	0.73	0.73	1.07	1.03	0.93	1.00
SHRIMP:						
GULF & S. ATLANTIC	0.80	1.08	1.14	0.91	0.83	1.00
OTHER	0.77	0.88	1.24	0.94	0.85	1.00
TOTAL SHRIMP	0.80	1.07	1.14	0.91	0.83	1.00
TOTAL EDIBLE SHELLFISH	0.76	0.97	0.95	0.91	0.85	1.00
TOTAL EDIBLE FISH & SHELLFISH	0.93	1.02	0.96	0.95	0.89	1.00
INDUSTRIAL FISH:						
MENHADEN	0.98	0.99	1.03	1.03	0.94	1.00
ALL FISH	0.93	1.02	0.96	0.95	0.89	1.00

NUMBER OF FISHERMEN AND FISHING CRAFT
1974 – 1985



FISHERY EMPLOYMENT, CRAFT, AND ESTABLISHMENTS, VARIOUS YEARS, 1970-85

Item	1970	1972	1974	1976	1978(1)	1985(1)
			Number			
Persons employed:						
Fishermen	140,538	139,119	161,361	173,610	188,300	238,800
Processing and wholesaling (2)	86,813	91,268	92,118	93,609	99,446	112,310
Total	227,351	230,387	253,479	267,219	287,746	351,110
Craft used:						
Vessels (3)	13,591	14,507	15,891	16,675	18,100	24,300
Motor boats	71,570	69,795	83,436	84,445	90,200	104,000
Other boats	2,000	1,570	1,907	1,501	1,600	1,500
Total	87,161	85,872	101,234	102,621	109,900	129,800
Processors and wholesalers:						
New England States	537	500	483	503	492	678
Mid-Atlantic States	832	793	745	768	763	633
South Atlantic States	432	445	433	522	506	657
Gulf Coast States	817	796	742	726	840	948
Pacific States	402	223	356	362	437	424
Alaska	108	322	239	182	178	442
Inland States	564	537	487	511	266	(4) 196
Other	43	47	49	43	42	(5) 30
Total	3,735	3,663	3,534	3,617	3,524	4,008

(1) Fishermen and craft estimated. (2) Average for season. (3) Craft 5 net tons and over as documented by U.S. Coast Guard. (4) Data estimated for some Inland States. (5) A partial survey was conducted for Hawaii and Guam.

PROCESSORS AND WHOLESALERS: PLANTS AND EMPLOYMENT, 1985

STATE AND AREA	PROCESSING			WHOLESALE			TOTAL		
	PLANTS	EMPLOYMENT SEASON	AVERAGE YEAR	PLANTS	EMPLOYMENT SEASON	AVERAGE YEAR	PLANTS	EMPLOYMENT SEASON	AVERAGE YEAR
					-NUMBER-				
NEW ENGLAND:									
MAINE	102	3,484	2,381	177	523	432	279	4,007	2,813
NEW HAMPSHIRE	10	336	261	4	20	19	14	356	280
VERMONT	-	-	-	(1)	(1)	(1)	(1)	(1)	(1)
MASSACHUSSETTS	109	4,416	3,895	154	1,180	1,027	263	5,596	4,922
RHODE ISLAND	30	667	524	65	399	305	95	1,066	829
CONNECTICUT	3	48	42	24	110	96	27	158	138
TOTAL	254	8,951	7,103	424	2,232	1,879	678	11,183	8,982
MID-ATLANTIC:									
NEW YORK	40	539	480	164	1,533	1,364	204	2,072	1,844
NEW JERSEY	31	1,327	1,084	62	371	331	93	1,698	1,415
PENNSYLVANIA	14	1,426	1,177	14	224	215	28	1,650	1,392
DELAWARE	4	890	815	6	22	21	10	912	836
DISTRICT OF COLUMBIA	-	-	-	6	95	95	6	95	95
MARYLAND	69	3,263	2,343	70	669	543	139	3,932	2,886
VIRGINIA	103	4,693	3,716	50	612	541	153	5,305	4,257
TOTAL	261	12,138	9,615	372	3,526	3,110	633	15,664	12,725
SOUTH ATLANTIC:									
NORTH CAROLINA	107	3,065	2,215	220	961	653	327	4,026	2,868
SOUTH CAROLINA	16	469	295	78	404	242	94	873	537
GEORGIA	17	1,476	1,253	48	181	133	65	1,657	1,386
FLORIDA, EAST COAST	41	1,832	1,516	130	779	717	171	2,611	2,233
TOTAL	181	6,842	5,279	476	2,325	1,745	657	9,167	7,024
GULF:									
FLORIDA, WEST COAST	173	4,731	3,968	165	600	532	338	5,331	4,500
ALABAMA	67	2,290	1,662	25	200	137	92	2,490	1,799
MISSISSIPPI	52	2,251	1,627	24	180	125	76	2,431	1,752
LOUISIANA	130	4,504	3,180	148	1,274	1,098	278	5,778	4,278
TEXAS	43	2,707	1,992	121	904	670	164	3,611	2,662
TOTAL	465	16,483	12,429	483	3,158	2,562	948	19,641	14,991
PACIFIC:									
CALIFORNIA	70	4,606	3,862	64	873	767	134	5,479	4,629
OREGON	35	1,555	1,240	30	127	103	65	1,682	1,343
WASHINGTON	141	3,975	2,646	84	468	348	225	4,443	2,994
TOTAL	246	10,136	7,748	178	1,468	1,218	424	11,604	8,966
ALASKA (2)	442	31,244	23,000	(3)	(3)	(3)	442	31,244	23,000
INLAND AREAS: (2)									
ARKANSAS, COLORADO, IDAHO, AND OKLAHOMA	7	161	161	3	7	5	10	168	166
KANSAS, MISSOURI, SOUTH DAKOTA, AND UTAH	5	80	73	14	44	42	19	124	115
ILLINOIS	14	182	177	23	216	212	37	398	389
INDIANA	-	-	-	10	85	78	10	85	78
IOWA	6	219	184	7	36	35	13	255	219
MICHIGAN	15	157	130	21	215	203	36	372	333
MINNESOTA	8	333	144	6	33	31	14	366	175
NEBRASKA, NEVADA, AND NORTH DAKOTA	-	-	-	5	17	11	5	17	11
OHIO	5	43	37	14	46	41	19	89	78
WISCONSIN	19	225	200	14	62	62	33	287	262
TOTAL	79	1,400	1,106	117	761	720	196	2,161	1,826
OTHER AREAS OR STATES: (4)									
GUAM, HAWAII, AND NORTHERN MARIANAS	7	103	67	16	96	93	23	199	160
AMERICAN SAMOA, AND PUERTO RICO	7	11,467	10,793	(3)	(3)	(3)	7	11,467	10,793
TOTAL	14	11,570	10,860	16	96	93	30	11,666	10,953
GRAND TOTAL	1,942	98,744	77,140	2,066	13,566	11,327	4,008	112,310	88,467

(1) INCLUDED WITH NEW HAMPSHIRE. (2) DATA FOR ALASKA AND SOME INLAND STATES HAVE BEEN ESTIMATED. (3) DATA NOT AVAILABLE. (4) A PARTIAL SURVEY WAS CONDUCTED FOR HAWAII AND GUAM.

PLANTS PRODUCING CANNED FISHERY PRODUCTS, INDUSTRIAL FISHERY PRODUCTS, AND FISH FILLETS AND STEAKS, 1986

Area and State	Canned fishery products	Industrial fishery products	Fish fillets and steaks	Total plants exclusive of duplication
			Number	
New England:				
Maine	12	4	31	47
Massachusetts	-	2	65	67
New Hampshire	-	-	2	2
Rhode Island	-	-	14	14
Connecticut	1	-	3	4
Total	13	6	115	134
Mid-Atlantic:				
New York	3	1	20	23
New Jersey	11	2	2	15
Pennsylvania	3	-	2	5
Delaware	3	-	-	3
Maryland	1	1	-	2
Virginia	2	7	4	11
Total	23	11	28	59
South Atlantic and Gulf:				
North Carolina	3	5	18	25
South Carolina	2	1	2	5
Georgia	-	2	2	4
Florida	1	7	33	40
Alabama	-	3	-	3
Mississippi	4	2	-	6
Louisiana	7	15	5	27
Texas	1	-	-	1
Total	18	35	60	111
Pacific:				
Washington	20	8	34	59
Oregon	5	2	13	20
California	5	7	29	40
Total	30	17	76	119
Alaska	51	2	4	57
Inland States:				
Illinois	-	-	8	8
Iowa	-	1	4	5
Michigan	2	-	7	9
Minnesota	-	2	3	3
Ohio	1	-	2	3
Wisconsin	1	3	11	14
Total	4	6	35	42
Hawaii	-	-	2	2
American Samoa	2	2	-	2
Puerto Rico	5	4	-	5
Grand total	146	83	320	531

FISHERY PRODUCTS AND ESTABLISHMENTS INSPECTED IN CALENDAR YEAR 1986

Region	Edible fishery products						
	Establishments (1)		Amount inspected				
	SIFE (2)	PUFI (3)	Grade A (4)	PUFI (4)	No mark (5)	Lot (6)	Total
	- - Number - -		- - - - - - - - - Thousand pounds - - - - - - - - -				
Northeast.....	2	38	77,364	164,863	9,025	26,810	278,062
Southeast.....	2	55	18,933	22,656	13,983	13,465	69,037
West.....	3	27	32,113	4,484	14,648	44,018	95,263
Total, 1986.....	7	120	128,409	192,003	37,656	84,294	442,362
Total, 1985.....	8	108	117,720	193,422	47,225	84,405	442,772

(1) These establishments are inspected under contract and certified as meeting U.S. Department of Commerce (USDC) regulations for construction and maintenance of facilities and equipment, processing techniques, and employment practices.

(2) Fish processing establishments approved for sanitation under the Sanitary Inspected Fish Establishment Service (SIFE). Products are not processed under inspection.

(3) Sanitarily inspected fish establishments processing fishery products under USDC inspection.

(4) Products processed under USDC inspection in inspected establishments and labeled with USDC inspection mark as "Packed Under Federal Inspection" (PUFI) or "U.S. Grade A."

(5) Products processed under inspection in inspected establishments but bearing no USDC inspection mark.

(6) Lot inspected products checked for quality and condition at the time of examination and located in processing plants, warehouses, cold storage facilities, or terminal markets anywhere in the United States.

Source:--NMFS, Office of Utilization Research, F/S3.

FISHERY COOPERATIVES IN THE UNITED STATES, GUAM AND PUERTO RICO, 1986

Region and State or area	Total	Members (1)	Fishing craft (1)	Functions performed by cooperatives		
				Marketing and purchasing	Marketing exclusively	Other (2)
				Number		
New England and Middle Atlantic:						
Maine	17	1,372	508	14	-	3
Massachusetts	4	752	222	4	-	4
Rhode Island	2	244	161	-	1	1
Connecticut	1	125	40	-	-	1
New Jersey	3	70	51	3	-	-
New Hampshire	1	21	21	-	-	1
New York	1	28	28	1	-	-
Total	29	2,612	1,031	22	1	10
South Atlantic and Gulf:						
Florida	2	45	55	-	2	-
Georgia	1	17	40	-	-	1
Mississippi	1	9	-	-	-	1
South Carolina	1	8	8	1	-	-
Texas	1	42	100	1	-	-
Total	7	125	212	3	2	2
Great Lakes and Inland:						
Michigan	1	234	90	-	-	1
Minnesota	1	350	150	-	-	1
Total	2	584	240	-	-	2
Pacific Coast:						
Alaska	21	3,819	3,181	1	3	16
California	18	2,583	1,895	-	5	13
Oregon	2	190	140	1	-	1
Washington	13	1,749	2,292	-	-	13
Total	59	8,846	7,860	2	6	49
Hawaii	3	(3)	(3)	-	-	3
Guam	1	(3)	(3)	-	1	-
Puerto Rico	23	485	314	-	-	23
Grand total	118	12,137	9,299	26	12	83

(1) Number of members and fishing craft estimated.

(2) These provide one or more of the following services: insurance, transportation, purchasing supplies, legislative lobbying, production, processing, and marketing, or collective bargaining.

(3) Not available.

Note:--Fishery cooperatives meet at least one of the following two requirements: 1. Each member of the Association has one vote irrespective of the amount of stock or membership capital he may own therein; or 2. The Association's dividends on stock or membership capital does not exceed 8 percent per year. In any case the Association shall not deal in the products of nonmembers in an amount greater in value than is handled for members.

Source:--NMFS, Industry Development Division, F/M21.

THE MAGNUSON FISHERY CONVERSATION AND MANAGEMENT ACT

The Magnuson Fishery Conservation and Management Act (Magnuson Act), Public Law 94-265 as amended, provides for the conservation and management of all fishery resources within the U.S. Exclusive Economic Zone (EEZ) except highly migratory species of tuna. It also provides for fishery management authority over continental shelf resources and anadromous species beyond the EEZ, except when they are found within a foreign nation's territorial sea or fishery conservation zone (or equivalent), to the extent that such sea or zone is recognized by the United States.

The EEZ extends from the seaward boundaries of the territorial sea (3 nautical miles from shore for all but two States) to 200 nautical miles from shore. The seaward boundaries of Texas, Puerto Rico, and the Gulf Coast of Florida are 3 marine leagues (9 nautical miles).

GOVERNING INTERNATIONAL FISHERY AGREEMENTS

Under the Magnuson Act, the U.S. Department of State, with cooperation from the National Oceanic and Atmospheric Administration (NOAA) of the U.S. Department of Commerce, negotiates Governing International Fishery Agreements (GIFAs) with foreign countries wishing to fish within the EEZ. After a GIFA is signed, it is transmitted by the President to the Congress for review.

FOREIGN FISHING PERMITS

Vessels of foreign nations which have GIFAs with the United States may fish in the EEZ for species managed under the Magnuson Act after receiving an allocation of that species and a valid fishing permit. After a GIFA is in force, a foreign nation must submit a permit application to the U.S. Department of State for each vessel to fish in the EEZ. Permit applications must also be made for foreign vessels to receive U.S. harvested fish in the EEZ, and to conduct any other operation in support of the catching, taking, or harvesting of fish in the EEZ. The U.S. Department of State provides copies of the applications to the Congress, the U.S. Coast Guard, the appropriate Regional Fishery Management Councils, and to the Assistant Administrator for Fisheries of the National Marine Fisheries Service (NMFS) with its recommendations. The NMFS also receives recommendations from the Regional Fishery Management Councils and the U.S. Coast Guard, as well as the general public.

The Assistant Administrator for Fisheries reviews recommendations bearing on approval of each application and, after consulting with the U.S. Department of State and the U.S. Coast Guard, may approve an application in whole or in part. Any conditions and restrictions on the approval of an application are sent to the foreign nation through the U.S. Department of State, and must be accepted by the nation before a permit is issued.

FEES

Foreign nations engaged in fisheries subject to U.S. jurisdiction are charged permit fees, poundage fees, a foreign fee surcharge, and an observer fee.

The permit fees in 1986 recovered costs of issuing permits, based upon a standard administrative charge of $167 for each foreign permit application.

Poundage fees are charged for the fish harvested by foreign vessels. Poundage fees vary in relation to the exvessel values of the species harvested by a nation's vessels. Poundage fees are not currently charged for U.S. harvested fish received by foreign vessels. Collections from 1986 poundage fees were expected to decrease below 1985 collections because of sharp reductions in foreign fishing in 1986.

The surcharge is to capitalize a fund to compensate U.S. fishermen operating in the EEZ whose vessels or gear are lost or damaged because of conflicts with foreign vessels. The surcharge on poundage and permit fees was waived in 1986 because the fund was fully capitalized.

The observer fee covers U.S. costs including salary, per diem, transportation, and overhead for U.S. observers on board foreign vessels. The fee is computed on the basis of actual observer trips.

Beginning in FY 1987, the Secretary may also require an incremental fee which is a percentage of the poundage fee from any country found not to be cooperating in the conservation and development of U.S. fishery resources.

FOREIGN ALLOCATIONS

The total allowable level of foreign fishing (TALFF), if any, for any fishery subject to the exclusive fishery management authority of the United States is that portion of the optimum yield (OY) of such fishery that will not be harvested by vessels of the United States

Each assessment of OY and each assessment of the anticipated U.S. harvest is reviewed during each fishing season. Adjustments to TALFFs are based on updated information relating to status of stocks, estimated and actual performance of domestic and foreign fleets, and other relevant factors.

FMPs and PMPs

Under the Magnuson Act, eight Regional Fishery Management Councils are charged with preparing Fishery Management Plans (FMPs) for the fisheries needing management under their jurisdiction. After the Councils develop FMPs which cover domestic and foreign fishing efforts, the FMPs are submitted to the Secretary of Commerce for approval and implementation. The Department, through NMFS agents and the U.S. Coast Guard, is responsible for enforcing the law and regulations.

The Secretary of Commerce is also empowered to prepare plans. Where no FMP exists, Preliminary Fishery Management Plans (PMPs), which only cover foreign fishing efforts, are prepared by the Secretary for each fishery for which a foreign nation requests a permit. The Secretary is also empowered to produce an FMP for any fishery that a

THE MAGNUSON FISHERY CONVERSATION AND MANAGEMENT ACT

Council has not duly produced. In this latter case, the Secretary's plan covers domestic and foreign fishing.

As of December 31, 1986, six Preliminary Fishery Management Plans (PMPs) were in effect, many of which have been amended since first being implemented.

Atlantic Billfishes and Sharks
Foreign Trawl Fisheries of the Northwest Atlantic
Hake Fisheries of the Northwestern Atlantic
Pacific Billfishes and Oceanic Sharks
Bering Sea Herrings
Bering Sea Snails

Fishery Management Plans (FMPs)

Under section 304 of the Magnuson Act, all Council prepared Fishery Management Plans (FMPs) must be reviewed by the Secretary of Commerce. After FMPs have been approved under section 304 of the Magnuson Act, they are implemented by federal regulations, under section 305 of the Act. During 1986, two new FMPs adopted by the various Fishery Management Councils, were submitted for Secretarial review and approved. There are now 26 fisheries under federal management. The FMPs are listed below, and those marked with an asterik (*) were approved and implemented during 1986, After implementation, many FMPs are amended by the Council and submitted for approval under the same Secretarial review process as new FMPs. Many of the Plans listed below have been amended since initial implementation.

American Lobster
Northeast Multispecies(*)
Atlantic Mackerel, Squid, and Butterfish
Atlantic Sea Scallops
Atlantic Surf Clams and Ocean Quahogs fisheries
Swordfish
Gulf and South Atlantic Spiny Lobster
Caribbean Shallow Water Reef Fish
Gulf and South Atlantic Corals
Gulf of Mexico Reef Fish
Gulf of Mexico Shrimp
Gulf of Mexico Stone Crab
Coastal Migratory Pelagics
Caribbean Spiny Lobster
Snapper/Grouper
Northern Anchovy
Alaskan King Crab
Commercial and Recreational Salmon
High Seas Salmon
Tanner Crab
Pacific Groundfish
Gulf of Alaska Groundfish
Bering Sea and Aleutian Islands Groundfish
Western Pacific Spiny Lobster
Western Pacific Precious Corals
Western Pacific Bottomfish and Seamount Groundfish(*)

During 1986, 271 regulatory actions were processed via the Federal Register to implement FMP fishery management actions and rules for foreign fishing.

REGIONAL FISHERY MANAGEMENT COUNCILS

Council	States	Telephone Number	Executive Director
NEW ENGLAND	(Maine, New Hampshire, Massachusetts, Rhode Island, and Connecticut)	617-231-0422	Douglas G. Marshall Suntaug Office Park 5 Broadway (Rte.1) Saugus, MA 01906
MID-ATLANTIC	(New York, New Jersey, Delaware, Pennsylvania Maryland, and Virginia)	302-674-2331	John C. Bryson, Federal Bldg., Room 2115 300 So. News St. Dover, DE 19901
SOUTH ATLANTIC	(North Carolina, South Carolina, Georgia, and Florida)	803-571-4366	Robert K. Mahood Southpark Bldg., Suite 306 1 Southpark Circle, Charleston, SC 29407
GULF OF MEXICO	(Texas, Louisiana, Mississippi, Alabama, and Florida)	813-228-2815	Wayne E. Swingle Lincoln Center, Suite 881 5401 W. Kennedy Blvd., Tampa, FL 33609
CARIBBEAN	(Virgin Islands and the Commonwealth of Puerto Rico)	809-753-4926	Omar Munoz-Roure, Banco de Ponce Bldg. Suite 1108 Hato Rey, PR 00918
PACIFIC	(California, Washington, Oregon, and Idaho)	503-221-6352	Joseph C. Greenley Metro Center, Suite 420 2000 S.W. First Avenue Portland, OR 97201
NORTH PACIFIC	(Alaska, Washington, and Oregon)	907-274-4563	Jim H. Branson, 411 West 4th Ave., Suite 2D P.O. Box 103136 Anchorage, AK 99510
WESTERN PACIFIC	(Hawaii, American Samoa, Guam, and the Northern Mariana Islands)	808-523-1368	Kitty M. Simonds 1164 Bishop St., Room 1405 Honolulu, HI 96813

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATION: BY COUNTRY AND REGION, 1986

	North Atlantic (1) (2)	Washington Oregon, and California	Gulf of Alaska	Eastern Bering Sea and Aleutian Islands	Total Alaska	Grand Total (1)
	Metric tons, round weight					
Optimum yield (OY)...	458,575	317,800	471,651	2,003,000	2,474,651	3,251,026
DAH.....	351,925	141,000	430,005	1,401,012	1,831,017	2,323,942
DAP.....	263,275	16,000	304,240	245,149	549,389	828,664
JVP.....	52,575	125,000	125,765	1,155,863	1,281,628	1,459,203
Reserve.....	3,000	63,600	25,536	8,821	34,357	100,957
TALFF.....	103,650	113,200	16,110	593,167	609,277	826,127
COUNTRY ALLOCATIONS						
EEC						
Italy.....	4,021	0	0	0	0	4,021
Spain.....	3,829	0	0	0	0	3,829
German Democratic Republic.....	9,955	0	0	0	0	9,955
Japan.....	802	0	15,900	458,439	474,339	475,141
People's Republic of China.....	0	0	0	4,963	4,963	4,963
Poland.....	0	70,000	0	8,043	8,043	78,043
Republic of Korea....	0	0	0	116,169	116,169	116,169
Total.....	18,607	70,000	15,900	587,614	603,514	692,121

(1) DAH does not equal JVP + DAP. Optium Yield does not equal DAH+RESERVES+TALFF.

(2) Optimum Yield includes initial optimum yield for some species-see North Atlantic table.

Notes:--DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; TALFF=Total Allowable Level of Foreign Fishing.

Pacific Seamount Region closed to Foreign and Domestic Fishing.

Source:--NMFS, Office of International Fisheries, F/M32.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: NORTH ATLANTIC, BY SPECIES AND COUNTRY, 1986 (1)

Item	Red hake	Silver hake (2)	Sharks, except Dogfish	Loligo Squid(3)	Illex Squid(3)	Atlantic mackerel (3) (4)	Butterfish (3)	River herring	Other finfish	Total (4)
	Metric tons, round weight									
Max Optimum yield (OY) . .	22,000	43,000	6,150	33,000	30,000	213,750	12,000	8,000	247,000	614,900
ABC	-	-	-	27,750	22,500	196,500	12,000	-	-	258,750
Initial Optimum Yield.	-	-	-	27,750	20,128	74,606	9,941	-	-	132,425
DAH.	13,500	29,600	5,000	24,750	16,750	44,575	9,750	7,800	200,200	351,925
DAP.	13,500	7,600	-	22,125	12,000	10,500	9,750	7,800	180,000	263,275
JVP.	-	-	-	2,625	4,750	25,000	-	-	20,200	52,575
Reserve.	3,000	-	-	-	-	-	-	-	-	3,000
TALFF.	5,500	13,400	1,150	3,000	3,378	30,031	191	200	46,800	103,650
Country allocations										
EEC:										
Italy	50	450	0	1,545	850	300	74	2	750	4,021
Spain.	50	250	0	1,405	1,250	300	72	2	500	3,829
German Democratic Republic	50	250	0	45	45	9,000	45	20	500	9,955
Japan.	50	250	0	0	0	0	0	2	500	802
Total. . .	200	1,200	0	2,995	2,145	9,600	191	26	2,250	18,607

(1) OY=Optimum Yield; ABC=Allowable Biological Catch; DAH=Domestic Annual Harvest; and TALFF=Total Allowable Level of Foreign Fishing; Intial Optimum Yield = DAH & TALFF
(2) DAH does not equal JVP + DAP.
(3) April 1986 - December 1987 fishing year, allocations as of December 31, 1986, all other species base on January 1 to December 31 fishing.
(4) Includes 9,075 metric tons for recreational catch.

Source:--NMFS, Office of International Fisheries, F/M32.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, FOREIGN FISHING ALLOCATION AND BYCATCH ALLOWANCES WASHINGTON, OREGON, AND CALIFORNIA, BY SPECIES AND COUNTRY, 1986 (1)

	Species Available for Directed Foreign Fishing				Bycatch Allowances (2)					
	Pacific whiting	Short-belly rockfish	Jack mackerel	Total	Pacific ocean perch	Other rockfish (3)	Flat-fish	Sable-fish	Jack mackerel	Other species
	Metric tons, round weight									
Optimum yield (OY)...	295,800	10,000	12,000	317,800	-	-	-	-	-	-
DAH.....	135,000	6,000	0	141,000	-	-	-	-	-	-
DAP.....	15,000	1,000	0	16,000	-	-	-	-	-	-
JVP.....	120,000	5,000	0	125,000	-	-	-	-	-	-
Reserve.....	59,200	2,000	2,400	63,000	-	-	-	-	-	-
TALFF.....	101,600	2,000	9,600	113,200	-	-	-	-	-	-
% BYCATCH LIMITS (2)	-	-	-	-	0.062	0.738	0.100	0.173	3.000	0.500
COUNTRY ALLOCATIONS										
Poland.....	70,000	0	0	70,000	43	517	70	121	2,100	350

(1) TALFF = Total Allowance Level of Foreign Fishing; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; and JVP=Joint Venture Processing.

(2) Bycatch allowances are the maximum amounts of bycatch that can be taken by foreign vessels and are based on the bycatch limits which are percentages applied to each nation's Pacific whiting allocation.

(3) Includes shortbelly rockfish and widow rockfish.

Source:--NMFS, Office of International Fisheries, F/M32.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: GULF OF ALASKA, BY SPECIES AND COUNTRY, 1986 (1)

Item	Alaska pollock	Flounders	Pacific cod	Atka Mackerel	Rockfishes			Sablefish	Squid	Other species	Total
					Thorny-head	Pacific ocean perch	Other				
	Metric tons, round weight										
Optimum yield (OY). .	321,600	33,500	60,000	5,278	3,750	6,083	5,000	8,980	5,000	22,460	471,651
DAH.	318,140	26,810	35,792	4,232	3,000	6,083	5,000	8,980	4,000	17,968	430,005
DAP.	215,140	24,690	31,313	460	1,500	6,083	5,000	8,980	2,000	9,074	304,240
JVP.	103,000	2,120	4,479	3,772	1,500	0	0	0	2,000	8,894	125,765
Reserve. . . .	3,320	6,570	8,688	1,016	740	0	0	0	990	4,212	25,536
TALFF.	140	120	15,520	30	10	**	**	**	10	280	16,110
Country allocations											
Japan.	140	120	15,310	30	10	**	**	**	10	280	15,900

(1) OY=Optimum Yield; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; and TALFF=Total Allowable Level of Foreign Fishing.

** - Denotes species which Foreign Fleets are Prohibited from retaining.

Source:--NMFS, Office of International Fisheries, F/M32.

OPTIMUM YIELD, DOMESTIC ANNUAL HARVEST, RESERVE, TALFF, AND FOREIGN FISHING ALLOCATIONS: EASTERN BERING SEA AND ALEUTIAN ISLANDS, BY SPECIES AND COUNTRY, 1986 (1)

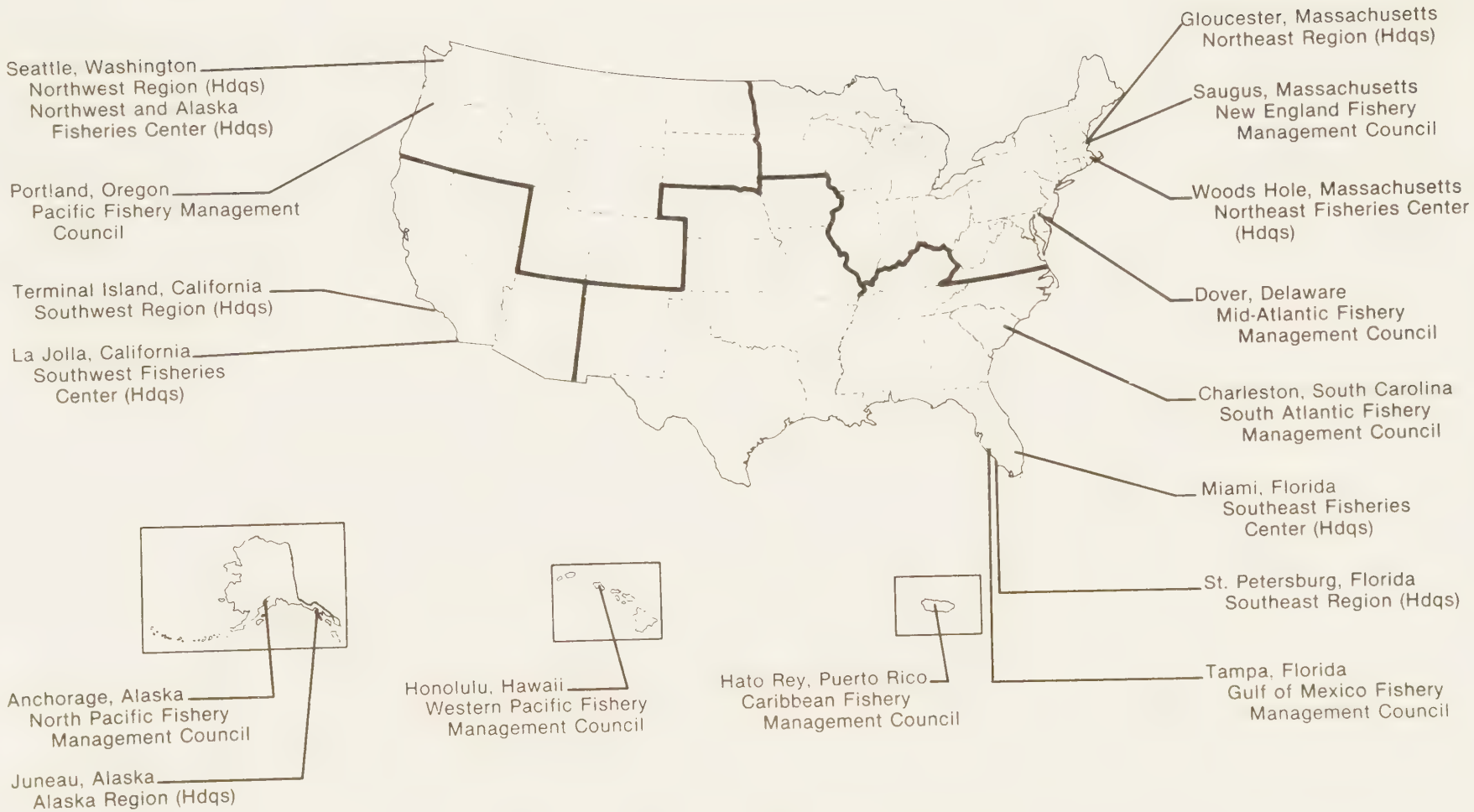
Item	Alaska pollock	Snail (meats)	Flatfish: Turbot	Flatfish: Arrowtooth flounder	Flatfish: Yellowfin sole	Flatfish: Other	Pacific cod
	Metric tons, round weight						
TAC	1,300,000	3,000	33,000	20,000	209,500	124,200	229,000
DAH	903,598	0	10,414	3,472	154,330	83,042	183,224
DAP	89,794	0	5,414	1,005	1,030	9,192	117,394
JVP	813,804	0	5,000	2,467	153,300	73,850	65,830
Reserve	0	0	4,950	3,000	-9,000	5,000	4,653
TALFF	396,402	3,000	17,636	13,528	64,170	36,158	41,123
Country allocations							
Poland	7,226	0	10	208	10	178	86
People Republic of China	3,417	0	5	137	894	120	227
Japan	298,013	3,000	12,082	10,508	52,667	29,285	36,511
Rep. of Korea	87,746	0	200	2,675	10,599	6,565	4,180
Total	396,402	3,000	12,297	13,528	64,170	36,148	41,004

Item	Rockfishes: Pacific ocean perch	Rockfishes: Other	Sablefish	Atka Mackerel	Squid	Other species	Total
	Metric tons, round weight						
TAC	7,625	6,625	6,450	30,800	5,000	27,800	2,003,000
DAH	7,820	6,841	7,551	32,000	110	8,610	1,401,012
DAP	7,166	6,439	7,085	10	10	610	245,149
JVP	654	402	466	31,990	100	8,000	1,155,863
Reserve	-300	-316	-1,266	-1,250	680	2,670	8,821
TALFF	105	100	165	50	4,210	16,520	593,167
Country allocations							
Poland	4	4	4	1	78	234	8,043
People Republic of China	2	2	3	1	43	112	4,963
Japan	59	55	93	38	3,247	12,881	458,439
Rep. of Korea	14	13	32	10	842	3,293	116,169
Total	79	74	132	50	4,210	16,520	587,614

(1) TAC=Total Allowable Catch; DAH=Domestic Annual Harvest; DAP=Domestic Annual Processing; JVP=Joint Venture Processing; and TALFF=Total Allowable Level of Foreign Fishing.
Source:--NMFS, Office of International Fisheries, F/M32.

NMFS Regional Offices
NMFS Fisheries Centers
Regional Fishery Management Councils

HDQS Locations



UNITED STATES DEPARTMENT OF COMMERCE

WASHINGTON, DC 20235

Mail routing code		Telephone number	Location
—	Secretary of Commerce, Malcolm Baldrige 14th and E Sts., NW. Washington, DC 20230	202-377-2112	Commerce
A	National Oceanic and Atmospheric Administration Administrator, Anthony J. Calio 14th and E Sts., NW. Washington, DC 20230	202-377-3567	Commerce
	NATIONAL MARINE FISHERIES SERVICE--CENTRAL OFFICE		
F	Assistant Administrator for Fisheries, William E. Evans	202-673-5450	Univ. Bldg.
F	Deputy Assistant Administrator for Fisheries	202-673-5450	Univ. Bldg.
F/MB	Management and Budget Staff	202-673-5455	Univ. Bldg.
F/PP	Policy and Planning Staff	202-673-5464	Univ. Bldg.
LA3 (F)	Constituent Affairs Staff	202-673-5429	Univ. Bldg.
GCF	Office of General Counsel-Fisheries	202-673-5206	Univ. Bldg.
CAF	Office of Congressional Affairs	202-673-5434	Univ. Bldg.
LA5 (F)	Office of Public Affairs	202-673-5445	Univ. Bldg.
F/M	Deputy Assistant Administrator for Fisheries Resource Management	202-673-5260	Univ. Bldg.
F/M1	Office of Fisheries Management	202-673-5263	Univ. Bldg.
F/M2	Office of Industry Services	202-673-5478	Univ. Bldg.
F/M3	Office of International Fisheries	202-673-5279	Univ. Bldg.
F/M4	Office of Protected Species and Habitat Conservation	202-673-5348	Univ. Bldg.
F/M5	Office of Enforcement	202-673-5295	Univ. Bldg.
F/S	Deputy Assistant Administrator for Science and Technology	202-673-5366	Univ. Bldg.
F/S1	Office of Resource Investigations	202-673-5362	Univ. Bldg.
F/S2	Office of Data and Information Management	202-673-5330	Univ. Bldg.
F/S3	Office of Utilization Research	202-673-5374	Univ. Bldg.

Location of Universal Building

The Universal Building, South is located at 1825 Connecticut Ave., NW, Washington, DC.

Mailing address

Use of the mail routing code will speed your mail. A sample address is as follows: Name and title, National Marine Fisheries Service (F), NOAA, U.S. Department of Commerce, Washington, DC 20235

REFERRAL DIRECTORY - WASHINGTON, DC OFFICES

INFORMATION AND SOURCE	TELEPHONE NUMBER
FEES, PERMITS, AND REGULATIONS	202-673-5315
Foreign fishing Joint ventures	
FINANCIAL SERVICES	202-673-5424
Compensation for loss of gear Construction, vessels (Tax Deferral Program) Insurance - vessel seizure by foriegn governments Loans and loan guarantees	
FISHERY MANAGEMENT OPERATIONS	202-673-5263
Artifical reefs Fishery Management Plans State grants	
INDUSTRY SERVICES	202-673-5478
Consumer education and marketing Exports/Imports licenses Market News Reports (general) Saltonstall-Kennedy (S-K) grants Tariffs Trade issues	
INTERNATIONAL FISHERIES	202-673-5300
Allocation (foreign fishing catches) Foreign fisheries (general)	
LAW ENFORCEMENT AND FINES	202-673-5295
PROTECTED SPECIES	202-673-5348
Lacey Act (general information) Marine Mammal Protection Act (general) Permits and regulations	
RESOURCE INVESTIGATIONS	202-673-5359
Acid rain and pollution Aquaculture information Diseases of fish Ecology and fish recruitment Fishing methods Resource abundance	
STATISTICAL DATA SERVICES	202-673-5335
Commercial fisheries - landings and value Fishery economics Imports and exports Joint ventures Operating units (fishermen and vessels) Processed fishery products Recreational fisheries	
UTILIZATION RESEARCH	202-673-5371
Botulism and ciguatera poisoning Nutrition and quality of fishery products Seafood inspection and identity Safety and product standards	

Mail routing code		Telephone number	Location
	REGIONAL OFFICES		
F/NER	Northeast Region 14 Elm St., Federal Bldg. Gloucester, MA 01930	617-281-3600	Gloucester, MA
F/SER	Southeast Region 9450 Koger Blvd. St. Petersburg, FL 33702	813-893-3141	St. Petersburg, FL
F/NWR	Northwest Region 7600 Sand Point Way, N.E. # 1, BIN C15700 Seattle, WA 98115	206-526-6150	Seattle, WA
F/SWR	Southwest Region 300 South Ferry St. Terminal Island, CA 90731	213-514-6196	Terminal Island, CA
F/AKR	Alaska Region Federal Bldg., Room 453 709 West Ninth St., P.O. Box 1668 Juneau, AK 99802	907-586-7221	Juneau, AK
	FISHERIES CENTERS AND LABORATORIES		
F/NWC	Northwest and Alaska Fisheries Center 7600 Sand Point Way, N.E. # 4, BIN C15700 Seattle, WA 98115	206-526-4000	Seattle, WA
F/NWC81	Kodiak Investigations P.O. Box 1638 Kodiak, AK 99615	907-487-4961	Kodiak, AK
F/NWC9	Auke Bay Laboratory P.O. Box 210155 Auke Bay, AK 99821	907-789-6000	Auke Bay, AK
F/SEC	Southeast Fisheries Center 75 Virginia Beach Dr. Miami, FL 33149	305-361-4284	Miami, FL
F/SEC1	Miami Laboratory 75 Virginia Beach Dr. Miami, FL 33149	305-361-4225	Miami, FL
F/SEC2	Mississippi Laboratories 3209 Frederick St. P.O. Drawer 1207 Pascagoula, MS 39568	601-762-4591	Pascagoula, MS
F/SEC5	Panama City Laboratory 3500 Delwood Beach Rd. Panama City, FL 32407	904-234-6541	Panama City, FL
F/SEC6	Galveston Laboratory 4700 Avenue U Galveston, TX 77550	409-766-3500	Galveston, TX

(Continued)

Mail routing code		Telephone number	Location
	FISHERIES CENTERS AND LABORATORIES - Continued		
F/SEC8	Charleston Laboratory 217 Fort Johnson Rd. P.O. Box 12607 Charleston, SC 29412	803-762-1200	Charleston, SC
F/SEC9	Beaufort Laboratory Pivers Island P.O. Box 570 Beaufort, NC 28516	919-728-4595	Beaufort, NC
F/NEC	Northeast Fisheries Center Woods Hole, MA 02543	617-548-5123	Woods Hole, MA
F/NEC1	Woods Hole Laboratory Woods Hole, MA 02543	617-548-5123	Woods Hole, MA
	Narragansett Laboratory Route 7A, P.O. Box 522A Narragansett, RI 02882	401-789-9326	Narragansett, RI
	Milford Laboratory Milford, CT 06460	203-878-2459	Milford, CT
	Sandy Hook Laboratory P.O. Box 428 Highlands, NJ 07732	201-872-0200	Highlands, NJ
	Oxford Laboratory Oxford, MD 21654	301-226-5193	Oxford, MD
	Gloucester Laboratory Emerson Ave. Gloucester, MA 01930	617-281-3600 Ext. 237	Gloucester, MA
	National Systematics Laboratory 10th and Constitution Ave., NW. Washington, DC 20560	202-357-2550	Washington, DC
	Atlantic Environmental Group Route 7A, P.O. Box 522A Narragansett, RI 02882	401-789-9326	Narragansett, RI
F/SWC	Southwest Fisheries Center 8604 La Jolla Shores Dr. P.O. Box 271 La Jolla, CA 92038	619-546-7000	La Jolla, CA
F/SWC2	Honolulu Laboratory 2570 Dole St., P.O. Box 3830 Honolulu, HI 96812	808-943-1221	Honolulu, HI
F/SWC3	Tiburon Laboratory 3150 Paradise Dr. Tiburon, CA 94920	415-435-3149	Tiburon, CA
F/SWC4	Pacific Fisheries Environmental Group P.O. Box 831 Monterey, CA 93942	408-646-3311	Monterey, CA

(Continued)

NATIONAL MARINE FISHERIES SERVICE
NATIONAL FISHERY STATISTICS OFFICES

City	Telephone number	Name and address
		NORTHEAST REGION
NEW ENGLAND		
Portland	207-780-3322	Robert C. Morrill, U.S. Custom House, 312 Fore St., Room 17, P.O. Box 425, DTS, Portland, ME 04112
Rockland	207-594-5969	Peter S. Marckoon, Federal Bldg., 21 Limerock St., Room 217, P.O. Box 708, Rockland, ME 04841
Boston	617-223-8015	Claudia Dennis, 408 Atlantic Ave., Room 141 Boston, MA 02210
Gloucester	617-281-3600 Ext. 304	Vito P. Giacalone, Jones-Hunt Bldg., Emerson Ave., Gloucester, MA 01930
New Bedford	617-999-2452	Dennis E. Main, U.S. Custom House, 2nd and Williams Sts., New Bedford, MA 02740
New Bedford	617-994-9200	Paul O. Swain, Address same as above
Provincetown	617-487-0868	William D. Sprague, Post Office Bldg., Commercial St., P.O. Box 91, Provincetown, MA 02657
(1)Woods Hole	617-548-5123 Ext. 264	Ronnee L. Schultz, Northeast Fisheries Center, Water St., Woods Hole, MA 02543
Newport	401-847-3115	Lori Lathan, Post Office Bldg., Thames St., Newport, RI 02840
Pt. Judith	401-783-7797	Susan Murphy, 15 Sand Hill Cove Rd., P.O. Box 547, Pt. Judith, RI 02882
MIDDLE ATLANTIC		
Riverhead	516-727-0707	Emerson C. Hasbrouck, Jr., 518-B E. Main St., P.O. Box 873, Riverhead, L.I., NY 11901
Patchogue	516-475-6988	Fred C. Blossom, 22 W. Main St., P.O. Box 606, Patchogue, L.I., NY 11772
Toms River	201-349-3533	Eugene A. LoVerde, 26 Main St., P.O. Box 143, Toms River, NJ 08753
Cape May	609-884-2113	Patricia A. Yoos, 1400 Texas Ave., P.O. Box 624, Cape May, NJ 08204
CHESAPEAKE		
Oxford	301-226-5420	William E. Brey, Oxford Laboratory, P.O. Box 338, Oxford, MD 21654
Greenbackville	804-824-4725	George E. Ward, Biological Lab., Franklin City, Greenbackville, VA 23356
Hampton	804-723-3360	William N. Kelly, 5 East Queensway Mall, P.O. Box 436, Hampton, VA 23669
		SOUTHEAST REGION
SOUTH ATLANTIC		
Beaufort	919-728-4168	Kenneth C. Harris, Pivers Island, Beaufort Laboratory Beaufort, NC 28516
Manteo	919-473-5929	Glenwood P. Montgomery, Marine Resource Center, P.O. Box 967, Manteo, NC 27954
Charleston	803-762-1200	John C. DeVane, Jr., 217 Ft. Johnson Rd., P.O. Box 12607, James Island, SC 29412
Brunswick	912-265-7080	Daniel G. Foster, Federal Bldg., 801 Gloucester St., Room 104, Brunswick, GA 31520
New Smyrna Beach	904-427-6562	Elmer C. Allen, 200 Canal St., P.O. Box 566, New Smyrna Beach, FL 32069
(1)Miami	305-361-4462	J. Ernest Snell, 75 Virginia Beach Dr., Miami, FL 33149
West Palm Beach	305-837-5234	Howard C. Schaefer, 727 Belvedere Road, West Palm Beach, FL 33405

(1) Regional headquarters for statistics offices.

(Continued)

NATIONAL MARINE FISHERIES SERVICE
NATIONAL FISHERIES STATISTICS OFFICES - Continued

City	Telephone number	Name and Address
GULF		
Key West	305-294-1921	Edward J. Little, Jr., Office & Custom House Bldg., P.O. Box 269, Key West, FL 33040
Fort Myers	813-334-4364	Tom Herbert, Federal Bldg. P.O. Box 217, Fort Myers, FL 33902
St. Petersburg	813-893-3151	Betty J. Guisinger, 9450 Koger Blvd., St. Petersburg, FL 33702
Apalachicola	904-653-9500	Vacant, Post Office Bldg., P.O. Drawer 189, Apalachicola, FL 32320
Panama City	904-234-6541	Deborah Fable, 3500 Delwood Beach Rd., Panama City, FL 32401
Bayou La Batre	205-824-4149	Horace M. Flowers, D&H Furniture Bldg., Second Floor, 93 S. Wintzell Ave., P.O. Box 91, Bayou La Batre, AL 36501
Pascagoula	601-762-4591	Hermes G. Hague, 3209 Frederic St., SEFC Pascagoula Lab., P.O. Drawer 1207, Pascagoula, MS 39567
Cameron	318-762-3887	Colleen M. Fennessy, Sabine National Wildlife Refuge, State Highway 27, M.R.H. Box 107, Hackberry, LA 70645
Golden Meadow	504-475-7072	Gary J. Rousse, 1614 So. Bayou Dr., Rm. 511, P.O. Box 623, Golden Meadow, LA 70357
Houma	504-872-3321	Kathleen M. Hebert, Post Office Bldg., 425 Lafayette St., Room 128, Houma, LA 70360
New Iberia	318-365-1558	Shelley J. Du Puy, 327 S. Iberia St., Suite 8, New Iberia, LA 70560
New Orleans	504-589-6153	Thomas R. Dawley, World Trade Center, 2 Canal St., Suite 400-H, New Orleans, LA 70130
Aransas Pass	512-758-3787	Mary Magee, Landry Net Shop, Conn Brown Harbor, P.O. Drawer EE, Aransas Pass, TX 78336
Brownsville	512-831-4050	Edie Hernandez, Harbor Masters Bldg., Shrimp Basin, P.O. Box 467, Brownsville, TX 78520
Freeport	409-233-4551	Richard A. Allen, Brazosport Savings Center, P.O. Box 2533, Freeport, TX 77541
Galveston	409-766-3705	Margot Hightower, 4700 Avenue U Galveston, TX 77550
Port Arthur	409-724-4303	Madeline Bailey, Federal Bldg., 2875 75th St., Room 14-C, Port Arthur, TX 77640
		SOUTHWEST REGION
(1)Terminal Island	213-514-6674	Patricia J. Donley, 300 S. Ferry St., P.O. Box 3266, Terminal Island, CA 90731
Honolulu	808-955-8831	Doyle E. Gates, Honolulu Lab., P.O. Box 3830, Honolulu, HI 96822
		NORTHWEST REGION
(1)Seattle	206-526-6128	John K. Bishop, 7600 Sand Point Way, N.E., #1, Bin C 15700, Seattle, WA 98115
		ALASKA REGION
(1)Juneau	907-586-7228	Janet E. Smoker, 709 W. Ninth St., Federal Bldg., P.O. Box 1668, Juneau, AK 99801

(1) Regional headquarters for statistics offices.

PUBLICATIONS AVAILABLE FROM NATIONAL MARINE FISHERIES SERVICE, NOAA

SCIENTIFIC PUBLICATIONS

Information on formal scientific publications by NMFS (such as NMFS journals and Technical Reports) may be obtained from the Scientific Publications Office (F/NWR1), 7600 Sand Point Way N.E., Bin C-15700, Seattle, WA 98115. Telephone: 206-526-6107.

CURRENT FISHERY STATISTICS (CFS) SERIES

The reports listed below are in the Current Fishery Statistics (CFS) series. They are statistical bulletins on marine recreational fishing and commercial fishing, and on the manufacture and commerce of fishery products. For further information or to obtain a subscription to these publications, contact the office shown below:

NOAA, National Marine Fisheries Service
National Fishery Statistics Program (F/S21)
Washington, D.C. 20235
202-673-5335

Marine recreational fishing publications are released annually. If you wish a copy of the following publications, check the designated space ( ) and return to the office shown above.

( ) Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1983-1984 C.F.S. No. 8326

( ) Marine Recreational Fishery Statistics Survey, Pacific Coast, 1983-1984 C.F.S. No. 8325

( ) Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1981-1982 C.F.S. No. 8324

( ) Marine Recreational Fishery Statistics Survey, Pacific Coast, 1981-1982 C.F.S. No. 8323

( ) Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1979 (Revised)-1980 C.F.S. No. 8322

( ) Marine Recreational Fishery Statistics Survey, Pacific Coast, 1979-1980 C.F.S. No. 8321

( ) Marine Recreational Fishery Statistics Survey, Atlantic and Gulf Coasts, 1985 C.F.S. No. 8327

( ) Marine Recreational Fishery Statistics Survey, Pacific Coast, 1985 C.F.S. No. 8328

The bulletins shown below cover freezings and holdings, the production of various processed products, and the U.S. foreign trade in fishery products. The annual data shown in the publications are later published in Fishery Statistics of the United States. To order Fishery Statistics of the United States from the Government Printing Office (GPO) or the National Technical Information Service (NTIS), see the two pages that follow.

The following are available annually:

( ) FF Frozen Fishery Products

( ) MF-1 Processed Fishery Products:
(Includes (MF 1-5) Canned Fishery Products; Production of Fish Fillets and Steaks; Fish Sticks, Fish Portions, and Breaded Shrimp; and Industrial Fishery Products.)

( ) MF-6 Import and Exports of Fishery Products

The following publication is only available quarterly; monthly data will be available in the annual Processed Fishery Products (MF-1):

( ) Fish Meal and Oil

LIBRARY INFORMATION

Library information is available from NOAA's library, 6009 Executive Blvd., Rockville, MD 20852.
Telephone: 301-443-8334.

PUBLICATIONS AVAILABLE FROM U.S. GOVERNMENT PRINTING OFFICE

TECHNICAL REPORTS

Stock Number

003-020-00154-8 NOAA Technical Report, NMFS Circular 444, "Whales, Dolphins, and Porpoises of the Eastern North Pacific and Adjacent Arctic Waters--A Guide to Their Identification." July 1982. . . .$6.50

003-008-00200-5 International Trade Administration Report, "1987 U.S. Industrial Outlook" - a one-year forecast on the U.S. fishing industry plus one and five-year forecasts on other U.S. industries. January 1986 . . .$24.00

ANGLER'S GUIDE TO THE UNITED STATES ATLANTIC COAST

003-020-00070-3 Section II - Nantucket Shoals to Long Island Sound. . .$9.00

003-020-00072-0 Section IV - Delaware Bay to False Cape, Virginia. . .$9.00

003-020-00096-7 Section V - Chesapeake Bay . . .$9.00

003-020-00097-5 Section VI - False Cape, Virginia to Altamaha Sound, Georgia. . .$9.00

003-020-00098-3 Section VII - Altamaha Sound, Georgia, to Fort Pierce Inlet, Florida. . .$9.00

003-020-00099-1 Section VIII - St. Lucie Inlet, Florida, to the Dry Tortugas . . .$9.50

ANGLER'S GUIDE TO THE UNITED STATES PACIFIC COAST

003-020-00113-1 Marine Fish, Fishing Grounds and Facilities. . .$8.50

MARINE LIFE POSTERS

(printed on washable non-glare plasticized paper)

003-020-00027-4 Marine Fishes of the North Atlantic. . .$5.50

003-020-00051-7 Marine Fishes of the North Pacific. . .$5.50

003-020-00055-0 Marine Fishes of the California Current and adjacent waters . . .$5.50

003-020-00065-7 Marine Fishes of the Gulf and South Atlantic. . .$5.50

003-020-00069-0 Fishes of the Great Lakes . . .$5.50

003-020-00087-8 Mollusks and Crustaceans of the Coastal U.S. . .$5.50

003-020-00106-8 Marine Mammals of the Western Hemisphere. . .$7.00

003-020-00152-1 Sea Turtles of the World . . .$5.00

SEAFOOD COOKBOOKS

003-020-00001-1 How to Eye and Buy Seafood . . .$1.50

003-020-00052-5 Fish and Shellfish Over the Coals. . .$1.75

003-020-00074-6 A Little Fish Goes a Long Way . . .$1.50

003-020-00104-1 Seafood Slimmers. . .$1.25

003-020-00105-0 Can-Venient Ways with Shrimp . . .$1.00

003-020-00109-2 Nautical Notions for Nibbling . . .$1.50

003-020-00118-1 A Seafood Heritage: From the Rappahannock to the Rio Grande . . .$1.75

003-020-00122-0 A Seafood Heritage: From Plymouth to the Prairies . . .$2.50

003-020-00144-1 Seafoods for Health. . .$2.00

003-020-00145-9 Vitalize Your Life - Discover Seafood Your Guide To Nutrition From The Sea. . .$1.00 $10.00/100

To purchase publications listed on this page (Advance Payment Required), call or write:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
202-783-3238

PUBLICATIONS AVAILABLE FROM NATIONAL TECHNICAL INFORMATION SERVICE (NTIS), U.S. DEPARTMENT OF COMMERCE

Report of the National Marine Fisheries Service for the Calendar Year 1979, PB-82-220062.

MARINE RECREATIONAL FISHING

1970 Salt-Water Angling Survey, PB-265416.

Determination of the Number of Commercial and Non-Commercial Recreational Boats in the United States, Their Use, and Selected Characteristics, COM-74-11186.

Participation in Marine Recreational Fishing:
Northeastern United States, 1973-74, COM-75-10655.
Southeastern United States, 1974, PB-273160.

Marine Recreational Fishery Statistics Survey
Pacific Coast, 1979-80, PB84-199652

COMMERCIAL FISHERIES

Fisheries of the United States is a preliminary report with historical comparisons on the Nation's fishing, fish processing, and foreign trade in fishery products.

Year	Accession number	Year	Accession number
1966	COM-75-10662	1976	PB-268662
1967	COM-75-10663	1977	PB-282741
1968	COM-75-10664	1978	PB-297083
1969	COM-75-10665	1979	PB-80-201593
1970	COM-71-50081	1980	PB-81-241648
1971	COM-75-10666	1981	PB-82-215542
1972	COM-73-50644	1982	PB-83-216473
1973	COM-74-50546	1983	PB-84-195148
1974	COM-75-10862	1984	PB-86-144953
1975	PB-25-3966	1985	PB-87-143145

Fishery Statistics of the United States (Statistical Digest) is a final report on the Nation's commercial fisheries showing more detail than Fisheries of the United States.

Year	Accession number	Year	Accession number
1939	COM-75-11265	1959	COM-75-11062
1940	COM-75-11266	1960	COM-75-11063
1941	COM-75-11267	1961	COM-75-11064
1942	COM-75-11268	1962	COM-75-11065
1943	COM-75-11269	1963	COM-75-11066
1944	COM-75-11270	1964	COM-75-11067
1945	COM-75-11271	1965	COM-75-11068
1946	COM-75-11272	1966	PB-246429
1947	COM-75-11273	1967	PB-246430
1948	COM-75-11274	1968	COM-72-50249
1949	COM-75-11275	1969	COM-75-10887
1950	COM-75-11056	1970	COM-75-10643
1951	COM-75-11053	1971	COM-74-51227
1952	COM-75-11054	1972	COM-75-11430
1953	COM-75-11055	1973	PB-262058
1954	COM-75-11057	1974	PB-277796
1955	COM-75-11058	1975	PB-300625
1956	COM-75-11059	1976	PB-81-163438
1957	COM-75-11060	1977	PB-84-192038
1958	COM-75-11061		

STATE LANDINGS

Maine, 1946-76, PB-271296/1977-79, PB-81-128258.
Massachusetts, 1943-76, PB-275866/1977-79, PB-81-143182.
Rhode Island, 1954-77, PB-287627/1978-79, PB-81-157158.
New York, 1954-76, PB-275449/1977-79, PB-81-134546.
New Jersey, 1952-76, PB-275696/1977-79 PB-81-159048.
Maryland, 1960-76, PB-300636/1977-79 PB-81-159030.
Virginia, 1960-76, PB-300637/1977-79 PB-82-151960.
North Carolina, 1955-76, PB-288928/1977-79 PB-82-151978.
South Carolina, 1957-76, PB-289405/1977-79 PB-81-163198.
Georgia, 1956-77, PB-289814/1977-78 PB-81-157166.
Florida, 1950-76, PB-292068.
Alabama 1950-77, PB-80-121262/1978 PB-82-168071.
Mississippi, 1951-77, PB-80-121270/1978 PB-82-169079.
Louisiana, 1957-77, PB-300583/1978 PB-82-168063.
Texas, 1949-77, PB-300603/1978-79 PB-82-169004.
Shrimp, 1956-76, PB-80-124696/1977-78 PB-82-156183.
Gulf Coast Shrimp Data, 1958-76, PB-80-126899/1977 PB-82-170390.

OTHER PUBLICATIONS

Processors and Wholesale Dealers of Fishery Products in U.S. (excludes Alaska) 1984 (shows firm name, address, and major products), PB-87-143681.

Processors and Wholesalers of Alaska Fishery Products, 1978, PB-299246.

Directory of Aquaculture in the Southeast, 1976, PB-272-1512.

Revenues, Costs, and Returns from Vessel Operation in Major U.S. Fisheries, PB-265275.

Seafood Plant Sanitation, PB-271161.

List of Fishery Cooperatives in U.S. 1980-81, PB-82-107830.

Baseline Economic Forecast of the U.S. Fishing Industry to 1985, COM-75-11156.

Economic Impacts of the U.S. Commercial Fishing Industry, COM-75-11354.

A Survey of Fish Purchases by Socio-Economic Characteristics - Annual Report, COM-71-00647.

Future Investment in U.S. Fish Harvesting and Processing: A Discussion of Possible Alternative Requirements through 1985, PB-249591.

National Marine Fisheries Service: Seafood Consumption, 1973-1974, (a magnetic tape) PB-294725.

National Marine Fisheries Service: Species/Mercury Data (a magnetic tape) PB-283265.

The Maryland Blue Crab and Oyster Processing Industries: The Effects of Government Regulations, PB-82-159054.

To purchase the reports listed on this page, call or write:

NTIS
ATTN: Order Desk
5285 Port Royal Road
Springfield, VA 22161
703-487-4650

The National Fisheries Institute, a national trade association of seafood processors, brokers, importers, and buyers, in cooperation with and under contract to the National Marine Fisheries Service, has prepared a series of economic profiles of the U.S. seafood processing industry.

These profiles will serve as a primer for regulatory and policy analysts who may not be familiar with the intricacies of seafood processing and of economic constraints facing seafood processors, who are predominately small businessmen.

They present the business world of the seafood processor from an intergrated perspective, and address the resource, harvesting, processing, and marketing practices and constraints. The text is designed for the general reader and details are given only to illustrate the complexity of the industry. A thorough treatment of many topics is intentionally avoided and technical references are kept to a minimum. However, sufficient statistical data and references are provided to support economic analyses and further study.

The following reports may be purchased by mail directly from the National Technical Information Service.

The U.S. Blue Crab Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165704

The Maine Sardine Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165712

The U.S. Menhaden Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-165720

The U.S. Oyster Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166215

The U.S. Shrimp Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166233 (includes canned shrimp, breaded shrimp, and headless/peeled shrimp).

The New England Groundfish Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-166231.

Analysis of Seafood Consumption in the U.S. 1970, 1974, 1978, and 1981 PB-86-135043

The U.S. Seafood Processing Industry: An Economic Profile for Policy and Regulatory Analysts, PB-83-199265

BASIC ECONOMIC INDICATORS

American and Spiny Lobster, 1947-73, COM-47-11587
Atlantic and Pacific Groundfish, 1932,72, COM-74-11638
Blue Crab, 1947-72, COM-74-11585
Clams, 1947-74, COM-75-11089
Halibut, 1929-72, COM-74-11583
King and Dungeness Crabs, 1947-72, COM-74-11586
Menhaden, 1946-72, COM-74-11581
Oyster, 1947-72, COM-75-10384
Salmon, 1947-72, COM-74-11710
Scallops, 1930-72, COM-74-11582
Shrimp, 1947-72, COM-74-11709
Tuna, 1947-72, COM-74-11584

To purchase the reports listed on this page, call or write:

NTIS
ATTN: Order Desk
5285 Port Royal Road
Springfield, VA 22161
703-487-4650

SERVICES

SEA GRANT MARINE ADVISORY SERVICE

The Office of Sea Grant is a major program element of the National Oceanic and Atmospheric Administration. The National Sea Grant College Program is funded jointly by the Federal Government and colleges or universities. Sea Grant's Marine Advisory Service offers a broad range of information to recreational and commercial fishermen, fish processors, and others concerning the Nation's fisheries. The following program leaders can provide information on Sea Grant Activities:

William Hosking, Coordinator
Sea Grant Advisory Service
3940 Government Boulevard
Suite 5
Mobile, AL 36609
(205) 661-5004

Donald E. Kramer, Leader
Marine Advisory Program
University of Alaska
P.O Box 103160
Anchorage, AK 99501
(907) 274-9691

Duncan McMartin, Coordinator
Marine Advisory Program
Cooperative Extension Service
University of California
Davis, CA 95616
(916) 752-2193

Acting Director, MAS
University of Southern California
Inst. for Marine & Coastal Studies
University Park
Los Angeles, CA 90089
(213) 743-5904

Norman Bender, Program Leader
Sea Grant Co-op Extension Service
Marine Science Institute
University of Connecticut
Groton, CT 06340
(203) 445-8664

James Falk
Marine Advisory Service
College of Marine Studies
University of Delaware
Lewes, DE 19958
(302) 645-4235

Marion L. Clarke, Director
Sea Grant Extension Program
University of Florida
117 Newins/Ziegler Hall
Gainesville, FL 32611
(904) 392-1837

Mac Rawson, Associate Director
Marine Extension Service
University of Georgia
P.O. Box Z
Brunswick, GA 31523
(912) 264-7268

Bruce Miller, Director
Sea Grant Extension Service
University of Hawaii
1000 Pope Road, Room 217
Honolulu, HI 96822
(808) 948-8191

Robert Espeseth, Coordinator
Illinois/Indiana Sea Grant
Marine Extension Project
U/IL at Urbana-Champaign
1206 South Fourth Street
Champaign, IL 61820
(217) 333-1824

Ronald Becker, Associate Director
Marine Advisory Service
Center for Wetland Resources
Louisiana State University
Baton Rouge, LA 70803
(504) 388-6345

David Dow, Program Leader
Sea Grant Marine Advisory Program
University of Maine
Coburn Hall
Orono, ME 04469
(207) 581-1443

Acting Director
Sea Grant Extension Program
University of Maryland
College Park, MD 20742
(301) 454-4109

Norm Doelling, Executive Director
MIT SG Program, 1-211
Mass. Insti. of Technology
77 Massachusetts Avenue
Building E38-330
Cambridge, MA 02139
(617) 253-7041

Allen White
Marine Science Advisor
Woods Hole Ocean. Institu.
Woods Hole, MA 02543
(617) 548-1400

John Schwartz, Program Leader
Marine Advisory Service
Michigan State University
334 Natural Resource Building
East Lansing, MI 48824
(517) 355-9568

Dale Baker, Director
Sea Grant Extension Program
University of Minnesota
208 Washburn Hall
Duluth, MN 55812
(218) 726-8106

David Veal, Program Leader
Sea Grant Advisory Program
MS/AL SG Consortium, Suite 1-E
4646 West Beach Boulevard
Biloxi, MS 39531
(601) 388-4710

Brian Doyle, Program Leader
Sea Grant Marine Advisory Program
University of New Hampshire
NEC Administration Building
15 Garrison Avenue
Durham, NH 03824
(603) 862-3460

Alex Wypzyinski, Director
Sea Grant Extension Service
Rutgers University
P.O. Box 231, Cook College
New Brunswick, NJ 08903
(201) 932-9636

Michael Voiland, Prog. Leader
Sea Grant Extension Program
405 Administrative Bldg.
SUNY at Brockport
Brockport, NY 14420
(716) 395-2638

James Murray, Director
Marine Advisory Service
North Carolina State University
105 1911 Building
Raleigh, NC 27650
(919) 737-2454

Jeffrey M. Reutter, Director
Ohio Sea Grant Advisory Service
Assistant Dir., Ohio SG Program
484 West 12th Street
Columbus, OH 43210
(614) 422-8949

Howard F. Horton, Head
Extension/Sea Grant Program
Oregon State University
Dept. of Fisheries & Wildlife
Corvallis, OR 97331
(503) 754-4532

SEA GRANT ADVISORY SERVICE

Manuel Valdez-Pizzini
MAS Program Leader
University of Puerto Rico
Department of Marine Science
Mayaguez, PR 00708
(809) 832-4040, Ext. 3439, 3447

Edward Richardson, Director
URI Marine Advisory Service
University of Rhode Island
Narragansett Bay-Watkins Building
Narragansett, RI 02882
(401) 792-6211

Tom Sweeny, Program Leader
Clemson/Sea Grant Marine
Extension Program
287 Meeting Street
Charleston, SC 29401
(803) 727-2078

Donn Ward, Leader
Marine Advisory Program
Texas A&M University
Kliberg Center
College Station, TX 77843
(409) 845-8557

William DuPaul, Coordinator
Sea Grant Marine Advisory Service
Virginia Inst. of Marine Science
Gloucester Point, VA 23062
(804) 642-7164

Michael S. Spranger, Program Leader
Marine Advisory Service
Washington Sea Grant Program
University of Washington
3716 Brooklyn Avenue, N.E.
Seattle, WA 98105
(206) 583-6600

Allen Miller, Coordinator
Sea Grant Advisory Service
University of Wisconsin-Madison
1800 University Avenue
Madison, WI 53705
(608) 262-0644

National Sea Grant Depository
(Clearing house for all Sea Grant publications):

Pell Library Building
University of Rhode Island
Bay Campus
Narragansett, RI 02882
(401) 792-6114

SERVICES

FISHERIES DEVELOPMENT SERVICES

The National Marine Fisheries Service (NMFS) conducts activities to improve the productivity and competitiveness of the U.S. fishing industry in the world economy. Information is available for identifying foreign and domestic markets for a variety of species of fish and shellfish. Factors affecting international trade in fisheries products are analyzed, and information provided to government and industry. Information is also obtainable on government food purchase programs. In addition, financial services are available to give fishermen access to private sources of long term financing for fishing vessel construction, reconstruction, and reconditioning.

CENTRAL OFFICE

Director
Office of Industry Services
1825 Connecticut Ave., NW
Washington, DC 20235
202-673-5478
TELEX: 904269 NMFSNOAADOC WSH

Chief
Trade Services Division
Address same as above
202-673-5502

Chief
Financial Services Division
Address same as above
202-673-5424

NORTHEAST REGION

Chief
Services Division
14 Elm St., Fedl. Bldg.
Gloucester, MA 01930
617-281-3600 (ext. 341)
TELEX: 940007 NMFS GLOS

Chief
Utilization and Development Branch
Address same as above
617-281-3600 (ext. 347)

Chief
Financial Services Branch
Address same as above
617-281-3600 (ext. 203)

SOUTHEAST REGION

Chief
Fisheries Development Division
9450 Koger Blvd.
St. Petersburg, FL 33702
813-893-3271

Chief
Financial Services Branch
Address same as above
813-893-3148

Chief
Fisheries Development
Analysis Branch
Address same as above
813-893-3830

NORTHWEST REGION

Chief
Fisheries Development Division
7600 Sand Point Way N.E.
BIN C15700 (Building 1)
Seattle, WA 98115
206-526-6117
TELEX: 910 444 2786 NMFS SEA

Chief
Fisheries Development Branch
Address same as above
206-526-6117

Chief
Financial Services Branch
Address same as above
206-526-6122

SOUTHWEST REGION

Chief
Fisheries Development Division
300 South Ferry St.
Terminal Island, CA 90731
213-514-6677

Chief
Industry Services Branch
Address same as above
213-514-6679

Chief
Financial Services Branch
Address same as above
213-514-6685

ALASKA REGION

Chief
Fisheries Development Division
P.O. Box 1668
Juneau, AK 99802
907-586-7224
TELEX: 45377 NMFS AKR JNU

ANADROMOUS SPECIES. These are species of fish that mature in the ocean, and then ascend streams to spawn in freshwater. In the MFCMA, these species include, but are not limited to, Atlantic and Pacific salmons, steelhead trout, and striped bass. See 42 FR 60682, Nov. 28, 1977.

ANALOG PRODUCTS. These include imitation and simulated crab, lobster, shrimp, scallops, and other fish and shellfish products fabricated from processed fish meat (such as surimi).

BOAT, OTHER. Commercial fishing craft not powered by a motor, e.g., rowboat or sailboat, having a capacity of less than 5 net tons. See motorboat.

BREADED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a non-leavened mixture containing cereal products, flavorings, and other ingredients. Breaded products are sold raw or partially cooked.

BATTER-COATED FISH PRODUCTS. Sticks and portions or other forms of fish or shellfish coated with a batter containing a leavening agent and mixture of cereal products, flavoring, and other ingredients, and partially cooked in hot oil a short time to expand and set the batter.

BREADED SHRIMP. Peeled shrimp coated with breading. The product may be identified as fantail (butterfly) and round, with or without tail fins and last shell segment; also known as portions, sticks, steaks, etc., when prepared from a composite unit of two or more shrimp pieces, whole shrimp, or a combination of both without fins or shells.

BUTTERFLY FILLET. Two skin-on fillets of a fish joined together by the belly skin. See fillets.

CANNED FISHERY PRODUCTS. Fish, shellfish, or other aquatic animals packed in cans, jars, or other containers, which are hermetically sealed and heat-sterilized. Canned fishery products may include milk, vegetables, or other products. Most, but not all, canned fishery products can be stored at room temperature for an indefinite time without spoiling.

COMMERCIAL FISHERMAN. An individual who derives income from catching and selling living resources taken from inland or marine waters.

CONSUMPTION OF EDIBLE FISHERY PRODUCTS. Estimated amount of commercially landed fish, shellfish, and other aquatic animals consumed by the civilian population of the United States. Estimates are on an edible-weight basis and have been adjusted for beginning and ending inventories of edible fishery products. Consumption includes U.S. production of fishery products from both domestically caught and imported fish, shellfish, other edible aquatic plants, animals, and imported products; and excludes exports and purchases by the U.S. Armed Forces.

CONTINENTAL SHELF FISHERY RESOURCES. These are living organisms of any sedentary species that at the harvestable stage are either (a) immobile on or under the seabed or (b) unable to move except in constant physical contact with the seabed or subsoil of the continental shelf. The MFCMA now lists them as certain abalones, surf clam and ocean quahog, queen conch, Atlantic deep-sea red crab, dungeness crab, stone crab, king crabs, snow (tanner) crabs, American lobster, certain corals, and sponges.

CURED FISHERY PRODUCTS. Products preserved by drying, pickling, salting, or smoking. Do not include canned, frozen, irradiated, or pasteurized products. Dried products are cured by sun or air-drying; pickled or salted products are those products preserved by applying salt, or by pickling (immersing in brine or in a vinegar or other preservative solution); smoked products are cured with smoke or a combination of smoking and drying or salting.

EDIBLE WEIGHT. The edible weight of individual products as consumed.

EUROPEAN ECONOMIC COMMUNITY (EEC). Belgium and Luxembourg, Denmark, Federal Republic of Germany, Greece, France, Ireland, Italy, Netherlands, Portugal, Spain, and United Kingdom.

EXPORT VALUE. The value reported is generally equivalent to f.a.s. (free alongside ship) value at the U.S. port of export, based on the transaction price, including inland freight, insurance, and other charges incurred in placing the merchandise alongside the carrier at the U.S. port of exportation. The value excludes the cost of loading, freight, insurance and any other charges or transportation costs beyond the port of exportation.

EXVESSEL PRICE. Price received by the harvester for fish, shellfish, and other aquatic plants and animals.

"FISH AND CHIPS." This United States fisheries policy links foreign fishing privileges in the U.S. EEZ to foreign country contributions to the development of the U.S. fishing industry. These include reductions of foreign tariff and non-tariff barriers that restrict importation of fishery products, and other cooperation in advancing opportunities for fishery trade. This policy was incorporated into the foreign nation species allocation process as a matter of law by the 1980 amendments to the Magnuson Act.

FISH BLOCKS. Regular fish blocks are frozen blocks or slabs of fillets or pieces of fillets cut or sliced from fish. Minced fish blocks are frozen blocks or slabs of minced flesh produced by a meat and bone separating machine.

FISH FILLETS. The sides of fish that are either skinned or have the skin on, cut lengthwise from the backbone. Most types of fillets are boneless or virtually boneless; some may be labeled as "boneless fillets."

FISH MEAL. A high-protein animal feed supplement made by cooking, pressing, drying, and grinding fish or shellfish.

FISH OIL. An oil extracted from body (body oil) or liver (liver oil) of fish and marine mammals; mostly a byproduct of fish meal production.

FISH PORTION. A piece of fish flesh that is generally of uniform size with thickness of 3/8 of an inch or more and differs from a fish stick in being wider or of a different shape. A fish portion is generally cut from a fish block.

FISH SOLUBLES. A water-soluble protein byproduct of fish meal production. Fish solubles are generally condensed to 50 percent solids and marketed as "condensed fish solubles."

FISH STEAK. A cross-section slice cut from a large dressed fish. A steak is usually about 3/4 of an inch thick.

FISH STICK. An elongated piece of breaded fish flesh weighing not less than 3/4 of an ounce and not more than 1-1/2 ounces with the largest dimension at least three times that of the next larger dimension. A fish stick is generally cut from a fish block.

FISHING CRAFT, COMMERCIAL. Boats and vessels engaged in capturing fish, shellfish, and other aquatic plants and animals for sale.

FISHERY MANAGEMENT PLAN (FMP). A plan developed by a Regional Fishery Management Council, or the Secretary of Commerce under certain circumstances, to manage a fishery resource in the U.S. EEZ pursuant to the MFCMA.

FULL-TIME COMMERCIAL FISHERMAN. An individual who receives more than 50 percent of their annual income from commercial fishing activities, including port activity, such as vessel repair and re-rigging.

GROSS REGISTERED TONNAGE (GRT). The gross registered tonnage of a vessel is the internal cubic capacity of all space in and on the vessel that is permanently enclosed, with the exception of certain permissible exemptions. GRT is expressed in tons of 100 cubic feet.

GROUNDFISH. Broadly, fish that are caught on or near the sea floor. The term includes a wide variety of bottomfishes, rockfishes, and flatfishes. However, NMFS sometimes uses the term in a narrower sense. In import statistics shown in "Fisheries of the United States," the term applies to the following species: cod, cusk, haddock, hake, Atlantic pollock, and Atlantic Ocean perch.

IMPORT VALUE. Value of imports as appraised by the U.S. Customs Service according to the Tariff Act of 1930, as amended. It may be based on foreign market value, export value, constructed value, American selling price, etc. It generally represents a value in a foreign country, and therefore excludes U.S. import duties, freight, insurance, and other charges incurred in bringing the merchandise to the United States.

IMPORT WEIGHT. The weights of individual products as exported, i.e., fillets, steaks, whole, headed, etc.

INDUSTRIAL FISHERY PRODUCTS. Items processed from fish, shellfish, or other aquatic plants and animals that are not consumed directly by humans. These items contain products from seaweeds, fish meal, fish oils, fish solubles, pearl essence, shark and other aquatic animal skins, and shells.

INTERNATIONAL CONVENTION FOR THE NORTHWEST ATLANTIC FISHERIES (ICNAF). This convention, which entered into force on July 3, 1950, was for the investigation, protection, and conservation of the fishery resources of the Northwest Atlantic Ocean. In 1975, there were 18 member nations. The United States withdrew from ICNAF on December 31, 1976, because continued adherence to the convention was deemed incompatible with the extension of U.S. fishery management jurisdictions to 200 miles under the Magnuson Fishery Conservation and Management Act of 1976. See Northwest Atlantic Fisheries Organization (NAFO).

JOINT VENTURE. An operation authorized under the MFCMA in which a permitted foreign vessel receives fish in the U.S. FCZ from a U.S. vessel. The fish received from the U.S. vessel are part of the U.S. harvest.

LANDINGS, COMMERCIAL. Quantities of fish, shellfish, and other aquatic plants and animals brought ashore and sold. Landings of fish may be in terms of round (live) weight or dressed weight. Landings of crustaceans are generally on a live-weight basis except for shrimp which may be on a heads-on or heads-off basis. Mollusks are generally landed with the shell on, but for some species only the meats are landed, such as sea scallops. Data for all mollusks are published on a meat-weight basis.

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT, Public Law 94-265, as amended, (MFCMA). The Act provides a national program for the conservation and management of fisheries to allow for an optimum yield (OY) on a continuing basis and to realize the full potential of the Nation's fishery resources. The MFCMA established the U.S. Exclusive Economics zone (EEZ) (formerly the FCZ - fishery conservation zone) and a means to control foreign and certain domestic fisheries through PMPs and FMPs. Within the U.S. EEZ, the United States has exclusive management authority over all fish (meaning finfish, mollusks, crustaceans, and all other forms of marine animal and plant life other than marine mammals, birds, and highly migratory species of tuna). The Act provides further exclusive management authority beyond the U.S. EEZ for all continental shelf fishery resources and all anadromous species throughout the migratory range of each such species, except during the time they are found within any foreign nation's territorial sea or fishery conservation zone (or the equivalent), to the extent that such a sea or zone is recognized by the United States.

MARINE RECREATIONAL CATCH. Quantities of finfish, shellfish, and other living aquatic organisms caught, but not necessarily brought ashore, by marine recreational fishermen.

MARINE RECREATIONAL FISHING. Fishing for pleasure, amusement, relaxation, or home consumption. If part or all of the catch is sold, the monetary returns constitute an insignificant part of the person's income.

MARINE RECREATIONAL FISHERMEN. Those people who fish in marine waters primarily for recreational purposes. Their catch is primarily for home consumption, although occasionally a part or all of their catch may be sold and enter commercial channels.

MAXIMUM SUSTAINABLE YIELD (MSY). MSY from a fishery is the largest annual catch or yield in terms of weight of fish caught by both commercial and recreational fishermen that can be taken continuously from a stock under existing environmental conditions. A determination of MSY, which should be an estimate based upon the best scientific information available, is a biological measure necessary in the development of optimum yield.

METRIC TONS. A measure of weight equal to 1,000 kilograms, 0.984 long tons, 1.1023 short tons, or 2,204.6 pounds.

NORTHWEST ATLANTIC FISHERIES ORGANIZATION (NAFO). This convention, which entered into force January 1, 1979, replaces ICNAF. NAFO provides a forum for continued multilateral scientific research and investigation of fishery resources of the Northwest Atlantic. NAFO will manage fishery resources that occur beyond the limits of coastal nations fishery jurisdiction in the northwest Atlantic, and will ensure consistency between NAFO management measures in this area and those adopted by the coastal nations within the limits of their fishery jurisdiction.

MOTORBOAT. A motor-driven commercial fishing craft having a capacity of less than 5 net tons or not officially documented by the Coast Guard. See "boat, other."

OPTIMUM YIELD (OY). In the MFCMA, OY with respect to the yield from a fishery, is the amount of fish that (1) will provide the

greatest overall benefit to the United States, with particular reference to food production and recreational opportunities; and (2) is prescribed as such on the basis of maximum sustainable yield from such fishery, as modified by any relevant ecological, economic, or social factors.

PACKAGED FISH. A term used in NMFS publications prior to 1972 to designate fresh or frozen raw fish fillets and steaks.

PART-TIME COMMERCIAL FISHERMAN. An individual who receives less than 50 percent of their annual income from commercial fishing activities.

PER CAPITA CONSUMPTION. Consumption of edible fishery products in the United States divided by the total civilian population. In calculating annual per capita consumption, estimates of the civilian resident population of the United States on July 1 of each year are used. These estimates are taken from current population reports, series P-25, published by the U.S. Bureau of the Census.

PER CAPITA USE. The use of all fishery products, both edible and nonedible, in the United States divided by the total population of the United States.

PRELIMINARY FISHERY MANAGEMENT PLAN (PMP). The Secretary of Commerce prepares a PMP whenever a foreign nation with whom the United States has made a Governing International Fishery Agreement (GIFA) submits an application to fish in a fishery not managed by a FMP. A PMP is replaced by an FMP as soon as the latter is implemented. A PMP applies only to foreign fishing.

RETAIL PRICE. The price of fish and shellfish sold to the final consumer by food stores and other retail outlets.

ROUND (LIVE) WEIGHT. The weight of fish, shellfish, or other aquatic plants and animals as taken from the water; the complete or full weight as caught. The tables on world catch found in this publication include, in the case of mollusks, the weight of both the shells and the meats, whereas the tables on U.S. landings include only the weight of the meats.

SURIMI. Minced fish meat (usually Alaska pollock) which has been washed to remove fat and undesirable matters (such as blood, pigments, and odorous substances), and mixed with cryoprotectants, such as sugar and/or sorbitol, for a good frozen shelf life.

TOTAL ALLOWABLE LEVEL OF FOREIGN FISHING (TALFF). The TALFF, if any, with respect to any fishery subject to the exclusive fishery management authority of the United States, shall be that portion of the optimum yield of such fishery which will not be harvested by vessels of the United States, as determined by provisions of the MFCMA.

U.S. EXCLUSIVE ECONOMIC ZONE (EEZ). The MFCMA defines this zone as contiguous to the territorial sea of the United States and extending seaward 200 nautical miles measured from the baseline from which the territorial sea is measured. This was formerly referred to as the FCZ (Fishery Conservation Zone).

U.S.-FLAG VESSEL LANDINGS. Includes landings by all U.S. fishing vessels regardless of where landed as opposed to landings at ports in the 50 States. These include landings at foreign ports, U.S. territories, and foreign vessels in the U.S. FCZ under joint venture agreements. U.S. law prohibits vessels constructed or registered in foreign countries to land fish catches at U.S. ports.

U.S. TERRITORIAL SEA. A zone extending 3 nautical miles from shore for all States except Texas and the Gulf Coast of Florida where the seaward boundary is 3 marine leagues (9 nautical miles).

USE OF FISHERY PRODUCTS. Estimated disappearance of the total supply of fishery products both edible and nonedible on a round-weight basis without considering beginning or ending stocks, exports, military purchases, or shipments to U.S. territories.

VESSEL. A commercial fishing craft having a capacity of 5 net tons or more. These craft are either enrolled or documented by the U.S. Coast Guard and have an official number assigned by that agency.

WHOLESALE FISH AND SHELLFISH PRICES. Prices in this report generally are those received at principal fishery markets by primary wholesalers (processors, importers, and brokers) in customary quantities, free on board (f.o.b.) warehouse.

STATISTICAL SUBJECT INDEX

(Reference gives page numbers)

CLAMS
Canned, 47
Imports, 54
Landings, 2, 10, 14, 74
Supply, 74
Value of landings, 2, 10,14

CONSUMPTION
Canned, 82
Cured, 80
Fillets and steaks, 82
Fresh and frozen, 80
Per capita, country, 84
Per capita, U.S., 80
Salmon, canned, 82
Sardines, canned, 82
Shellfish, canned, 82
Shrimp, 82
Sticks and portions, 82
Tuna, canned, 82

COOPERATIVES, FISHERY, 93

CRABS
Canned, 47
Frozen holdings, 51
Imports, 54, 75
Landings, 2, 10, 14
Supply, 75
Value of landings, 2, 10, 14

CRAFT, FISHING
Motorboats, 89
Vessels, 89

DISPOSITION OF LANDINGS
United States, 6, 7
World, 42

DUTIES COLLECTED, 53

EMPLOYMENT
Establishments, 89
Fishermen, 89
Processing and wholesaling, 90

EXPORTS
All fishery products, 61
Country of destination, 62
Cured, 61
Edible, by years, 64
Fish meal, 61,68, 75
King crab, 61, 67
Mackerel, canned, 61
Nonedible, by years, 64
Oils, 61, 68, 79
Principal items, 61
Salmon, canned, 61, 66, 74
Salmon, fillets, 61, 66
Salmon, whole or eviscerated, 61, 66
Sardines, canned, 61, 74
Seal furs, 61
Shrimp, canned, 61, 65, 78

EXPORTS - continued
Shrimp, domestic and foreign products, 65, 78
Shrimp, fresh and frozen, 61, 65, 78
Snow (tanner) crab, 61, 67
Squid, canned, 61
Value, by years, 64
Volume, by years, 64

EXCLUSIVE ECONOMIC ZONE, THE U.S.
Foreign catch, by continent and country 29, 30
Foreign catch, by species and area, 31, 32
Foreign catch, by country and species, 33

FLOUNDERS
Fillets, 43
Foreign shores, landings off, 8, 12
Frozen holdings, 48
Landings, 1, 8, 12
Value of landings, 1, 8, 12
World catch, 42

GROUNDFISH FILLETS AND STEAKS
Fillets, supply, 72
Imports, 51, 56
Quota, imports, fillets, 57

HALIBUT
Frozen holdings, 51
Imports, 54
Landings, 1, 8, 12
Steaks, 46
Value of landings, 1, 8, 12
World catch, 42

HERRING, SEA
Canned (sardines), 47
Consumption (sardines), per capita, 82
Exports (sardines), 56
Imports (sardines), 61
Landings, 1, 8, 12
Value of landings, 1, 8, 12
World catch, 42

IMPORTS
All fishery products, 53, 54
Abalone, canned, 54
Blocks and slabs, 54, 56, 72
Bonito and yellowtail, canned, 54, 73
Clams, canned, 54
Continent and country, by, 55
Crabmeat, canned, fresh and frozen, 54, 75
Cured, 54
Duties collected, 53
Edible, 53, 54, 55, 70, 71

IMPORTS - continued
Fillets, groundfish and ocean perch, 53
Fillets, other than groundfish and ocean perch, 54
Finfish, 71
Groundfish, 54
Halibut, 54
Herring, canned, 54
Industrial, 70
Lobsters, canned, 54
Lobsters, fresh and frozen, 54
Meal and scrap, 54, 59
Nonedible, 53, 54, 55
Oils, 54, 79
Oysters, canned, 54
Principal items, 54
Quota, canned tuna, not in oil, 57
Quota, groundfish fillets and steaks, 57
Salmon, canned, 54, 74
Salmon, fresh and frozen, 54
Sardines, canned, 54, 74
Scallop meats, 54, 77
Shellfish, 71
Shrimp, by country, 58
Shrimp, by products, 59
Tuna, canned, 54, 73
Tuna, fresh and frozen, 54
Value, by years, 53, 54
Volume, by years, 53, 54

INSPECTION
Establishments and amount inspected, 92

JOINT VENTURES 19

LANDINGS
Disposition, 6, 7
Foreign shores, off, 8, 12
Historical, by regions, 16
Human food (edible), 6, 7
Industrial, 6, 7
Months, by, 7
Ports, major U.S., 5
Record year, by States, 4
Regions, by, 3
Species, by, 1
States, by, 4
U.S., 1, 6
U.S., shores, distance from, 8, 12
World, 39

LOBSTERS, AMERICAN
Imports, 54, 76
Landings, 3, 11, 15
Supply, 76
Value of landings, 3, 11, 15

LOBSTERS, SPINY
Foreign shores, landings off, 11,15
Frozen holdings, 51

LOBSTERS, SPINY - continued
Imports, 54, 72
Landings, 3, 11, 15
Supply, 76
Value of landings, 3, 11, 15

MACKERELS
Landings, 1, 8, 12
Meal, 50
Value of landings, 1, 8, 12
World catch, 42

MAGNUSON FISHERY CONSERVATION AND MANAGEMENT ACT (MFCMA)
Allocations by country and region, 96
Allocations by species and country, 97
Fees, foreign fishing, 94
General description, 94
Regional Fishery Management Councils, 95

MEAL AND SCRAP
Imports, 54, 59
Landings, disposition, 6
Mackerel, 50
Menhaden, 50
Production, U.S., 50
Supply, 79
Tuna, 50
World catch, disposition, 42

MENHADEN
Landings, 1, 9, 13
Meal, 50
Oil, 50
Value of landings, 1, 9, 13

OIL
Exports, 61, 68, 79
Imports, 54
Mackerel, 50
Menhaden, 50
Production, 50
Supply, 79
Tuna, 50
World catch, disposition, 42
Years, production, 50, 76

OYSTERS
Canned, 47
Imports, 54
Landings, 3, 11, 15
Supply, 77
Value of landings, 3, 11, 15

PLANTS AND FIRMS
Employment, 89, 90
Processors and wholesalers, 90
Producing canned, industrial products, and fillets and steaks, 91

PROCESSING
Animal food and bait, canned, 47
Canned products, 47
Canned, by year, 49
Clams, canned, 47
Crabs, canned, 47, 75
Employment in, 89, 90
Fillets and steaks, fresh and frozen, 46
Frozen holdings, 51
Industrial products, 50
Meal, oil, solubles, 50,79,
Oysters, canned, 47
Plants, number of, 89, 90, 91
Salmon, canned, 48, 74
Sardines, canned, 47, 74
Shrimp, canned, 48, 78
Squid, canned, 47
Sticks, portions, and breaded shrimp, 45
Tuna, canned, 47, 48, 73
Tunalike fish, canned, 47, 73
Value, processed products, 45

RECREATIONAL FISHERIES, MARINE 20

SALMON
Canned, 47, 48
Consumption, per capita, 82
Exports, 61, 66
Foreign shores, landings off, 9, 13
Frozen holdings, 51
Imports, 54
Landings, 1, 9, 13
Supply, canned, 74
Value of landings, 1, 9,13
World catch, 42

SARDINES
Canned, 47
Consumption, per capita, 82
Exports, 61
Imports, 54
Supply, canned, 74
World catch, 42

SCALLOPS
Imports, 54
Landings, 3, 11, 15
Supply, 77
Value of landings, 3, 11, 15

SHRIMP
Breaded, 45
Canned, 47, 48
Consumption, per capita, 82
Exports, 61, 65, 78
Foreign shores, landings off, 11, 15
Frozen holdings, 51
Imports, 51, 55, 59, 78
Landings, heads-off, 78
Landings, heads-on, 3, 11, 15
Supply, canned, 78
Supply, total, 78
Value of landings, 3, 11, 15

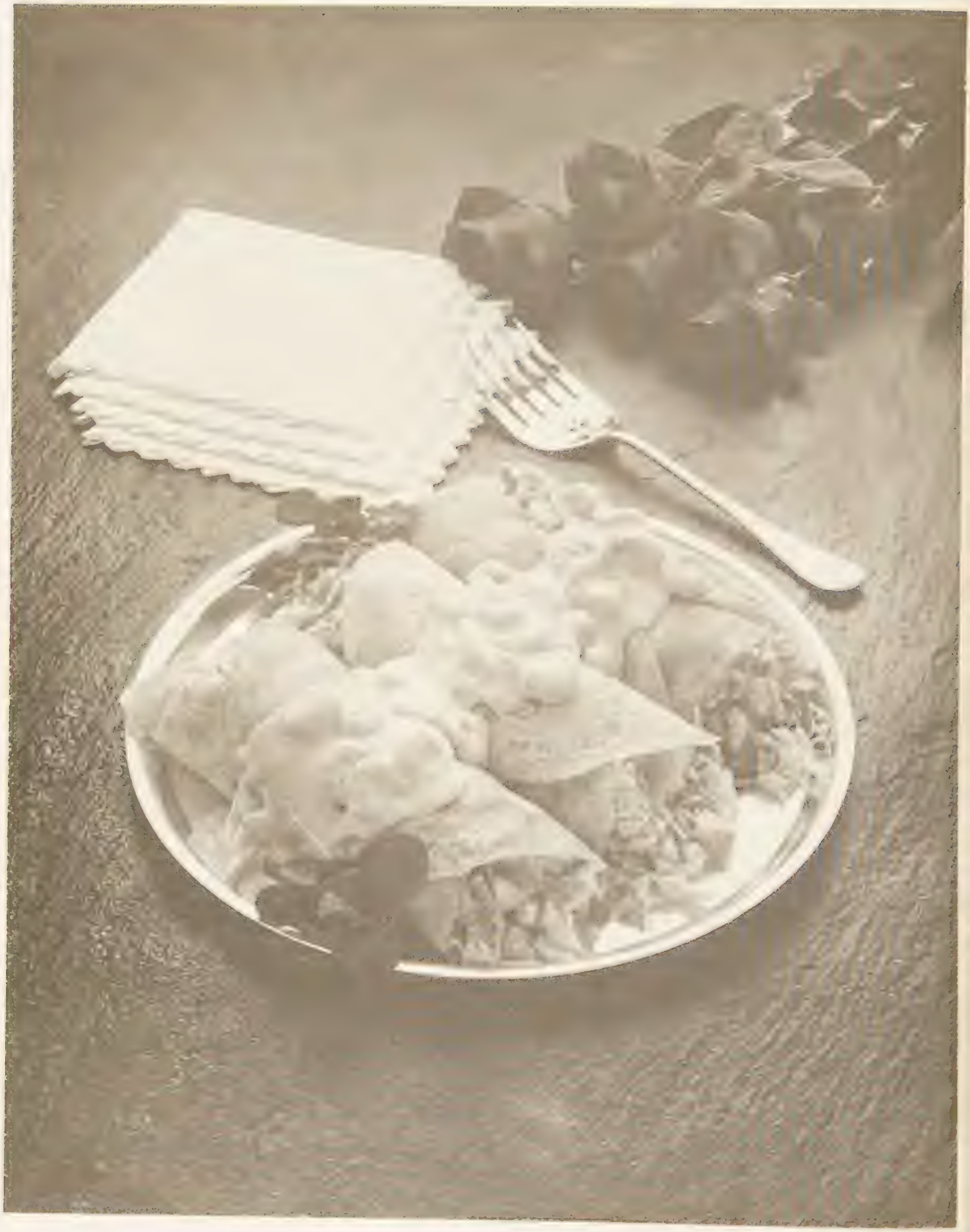
SUPPLY
All fishery products, 70, 71
Blocks, 62
Bonito and yellowtail, canned, 73
Clam meats, 74
Crabs, fresh and frozen, canned, 75
Edible fishery products, 70, 71
Fillets and steaks, all, 72
Fillets and steaks, groundfish, 72
Finfish, 71
Industrial fishery products, 70, 71
Lobsters, American, 76
Lobsters, spiny, 76
Meal, 79
Meal and solubles, 79
Oils, 79
Oysters, 77
Salmon, canned, 74
Sardines, canned, 74
Scallop meats, 77
Shellfish, 71
Shrimp, 78
Shrimp, canned, 78
Solubles, 79
Tuna, canned, 73

TUNA
Canned, 47, 48 73
Consumption, per capita, 82
Foreign shores, landings off, 10, 14
Imports, 54, 73
Landings, 2, 10, 14
Meal, 50
Oil, 50
Quota, imports, canned, 57
Supply, canned, 73
Value of landings, 2, 10, 14
World catch, 83

USE
Per capita, 83
Landings, by month, 7

WHITING
Frozen holdings, 51
Landings, 2, 10, 14
Value of landings, 2, 10, 14

WORLD FISHERIES
Catch by countries, 40
Catch by continents, 41
Catch by major fishing areas, 41
Catch by species groups, 42
Catch by years, 39
Disposition, 42
Imports and exports value, 43
Per capita consumption, by country, 84



Federal Inspection Marks For Fishery Products

FISHERY PRODUCTS ARE VOLUNTARILY INSPECTED. Beef and poultry, as well as many other perishable food items, are federally inspected at various stages of processing to ensure buyers that the product is safe, wholesome, and acceptable. Fishery products have no similar mandatory Federal inspection program; however, the U.S. Department of Commerce (USDC) provides a voluntary inspection program for fishery products. Seafood processors, packers, brokers, and users who are interested in having USDC inspect their products may subscribe voluntarily to the program. Users of the service pay for USDC inspection which evaluates their raw materials, ensures the hygienic preparation of products, and certifies the final quality and condition of the product. The USDC inspector functions as an objective observer in evaluating processing techniques and product quality and condition. Products packed in plants under USDC inspection can carry marks for easy consumer identification.

FEDERAL INSPECTION MARKS. Federal inspection marks are official marks approved by the Secretary of Commerce and authorized for use on brand labels of fishery products. When displayed on product labels, these marks signify that inspectors licensed by the Department of Commerce inspected, graded, and certified the products as having met all the requirements of inspection regulations, and have been produced in accordance with official U.S. grade standards or approved specifications.

WHAT DO THE INSPECTION MARKS MEAN? The distinctive inspection marks are symbols that signify two distinct but related functions in guiding the consumer to safe, wholesome products produced in a sanitary environment and packed in accordance with uniform quality standards under the supervision of the U.S. Department of Commerce's voluntary inspection service. The functions symbolized by each mark follow:

"U.S. GRADE" MARK. The "U.S. Grade" mark signifies that:

1. The product is clean, safe, and wholesome.
2. The product is of a specified quality, identified by the appropriate U.S. Grade designation, as determined by a federally-licensed inspector in accordance with established requirements in U.S. Grade Standards.
3. The product was produced in an acceptable establishment with proper equipment and in an appropriate processing environment as required by food control authorities.
4. The product was processed under supervision by federally-licensed food inspectors and packed in accordance with specific Good Manufacturing Practice Requirements.

5. The product is truthfully and accurately labeled as to common or usual name, optional ingredients, and quantity.

"PACKED UNDER FEDERAL INSPECTION" MARK. "Packed Under Federal Inspection" may be displayed as an official mark or as an official statement on the product label. The mark or statement signifies that the properly labeled product is clean, safe, and wholesome and has been produced in an acceptable establishment with appropriate equipment under the supervision of federally-licensed inspectors. The product has not been graded as to a specific quality level; rather, it is an acceptable commercial quality as determined by Federal inspectors in accordance with approved standards or specifications.

FOR FURTHER INFORMATION

Northeast Inspection Office
P.O. Box 1188
Emerson Ave.
Gloucester, MA 01930
(617) 281-3600

Southeast Inspection Office
Duval Building
9450 Koger Blvd.
St. Petersburg, FL 33702
(813) 893-3155

National Seafood Inspection Laboratory
3209 Frederic St.
P.O. Drawer 1207
Pascagoula, MS 39567
(601) 762-7402

Western Inspection Office
5600 Rickenbacker Road
Building No. 7
Bell, CA 90201
(213) 267-6734

National Seafood Inspection Program
Universal Building, S.
1825 Connecticut Ave., N.W.
Washington, DC 20235
(202) 673-5371

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE (F/S21)
Washington, D.C. 20235

OFFICIAL BUSINESS

POSTAGE AND FEES PAID
U.S. DEPARTMENT OF COMMERCE
COM-210

FIRST CLASS MAIL

U.S.MAIL